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**Code-Switcheando:  
Bilingual Practices of English Philology  
Students on Social Media**

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## TABLE OF CONTENTS

Abstract .....	1
1 Introduction.....	2
2 Theoretical framing .....	3
2.1 Bilingual practices: code-switching and code-mixing .....	3
2.2 Bilingual practices in computer-mediated communication .....	6
2.3 Platforms.....	8
2.3.1 WhatsApp, Instant Messaging (IM) .....	8
2.3.2 Instagram, photo and video sharing website/app .....	11
2.3.3 Twitter, short-text sharing website/app .....	12
2.4 Contexts for bilingualism on social media .....	14
3 Methods .....	15
3.1 Relevant information.....	15
3.2 Participants.....	16
3.2.1 Participant A.....	16
3.2.2 Participant B.....	17
3.2.3 Participant C.....	18
3.2.4 Participant D.....	19
4 Results .....	21
4.1 Participant A .....	21
4.1.2 WhatsApp group.....	22
4.1.3 Private conversations between Participant A and D.....	23

4.2 Participant B.....	25
4.2.1 Tweets.....	26
4.2.2 Instagram posts.....	27
4.2.3 WhatsApp conversations with people unconnected to the degree .....	28
4.2.4 WhatsApp group.....	31
4.3 Participant C.....	33
4.3.1 Tweets.....	33
4.3.2 Instagram posts.....	35
4.3.3 WhatsApp conversations with people unconnected to the degree .....	36
4.3.4 WhatsApp group.....	38
4.4 Participant D .....	40
4.4.1 Tweets.....	40
4.4.2 Instagram posts.....	42
4.4.3 WhatsApp conversations with people unconnected to the degree .....	43
4.4.4 WhatsApp group.....	45
5 Analysis .....	46
6 Conclusion .....	53
7 References .....	54
APPENDICES .....	57
APENDIX A - Consent Form.....	57
APENDIX B - WhatsApp Group Conversations.....	58
Private conversations between Participant A and Participant D.....	70



APPENDIX C - Participant A .....	73
WhatsApp conversations .....	73
APPENDIX D - Participant B .....	75
Tweets.....	75
Instagram posts .....	78
WhatsApp conversations .....	81
APPENDIX E - Participant C.....	83
Tweets.....	83
Instagram posts .....	86
WhatsApp conversations .....	90
APPENDIX F - Participant D.....	92
Tweets.....	92
Instagram posts .....	95
WhatsApp conversations .....	97

## INDEX OF TABLES

Table 1 - Medium and situational factors to characterize modes .....	6
Table 2 - WhatsApp medium factors .....	9
Table 3 - Instagram medium factors .....	11
Table 4 - Twitter medium factors .....	13

## **Abstract**

Research on multilingualism has shown that the role of code-switching (CS) and other more recent practices such as translanguaging are expanding in the online world at a very rapid pace. Despite earlier accounts treating CS as a deficient form of language learning, interactional CS reinforced this manner of communication as a valid means to construct and index meanings among speakers. In this paper, CS is taken as a practice that is performed online by a group of Spanish students enrolled in an English Philology degree in Catalonia. Four participants and the way they interacted online on WhatsApp, Twitter and Instagram over a period of two years were studied. Through the collection of two hundred and fifty pieces of online language data, the results show that CS is a frequent practice for constructing identity and communicating in-group membership.

**Key words:** code-switching, multilingualism, computer-mediated communication, youth identity

## **1 Introduction**

Interactional code-switching (CS) has been a topic of research for many years, stemming from Gumperz' (1982) suggestion that CS might be a way for bilingual speakers to create, exchange and express a long list of meanings. One of the environments in which CS has been found to happen most often in the group of young university students is computer-mediated communication (CMC).

This intertwinement of the two fields of study was first taken up by scholars such as Georgakopoulou (1997) or Paolillo (1996), though technology has advanced and developed at such a rapid pace that any study carried out on CMC might become outdated in the span of a year. New possibilities for easier and faster communication between speakers are emerging every day which, along with globalization, are making CS online a phenomenon that is becoming gradually more common among bilingual speakers of all ages. Globalization, as we will explain in more detail in this paper, has contributed to the creation of relationships of people across the globe that require a common language for communication.

In the first section of this paper, I will review previous research on the topic of CS, including the two opposing paradigm views of grammatical and interactional CS. Secondly, I will present the theoretical background on bilingualism and social media, where I introduce the concept of platform. We will proceed examining the three platforms known as Instagram, WhatsApp, and Twitter.

In the second section of this paper, we introduce the methods and criteria used to carry out research on a group of four English Philology students undertaking their studies at a public Catalan University which is unnamed for the sake of anonymity. All the participants are in their early twenties, and they very often use CS as a medium of communication between them. The participants' sociolinguistic background will be

explained, followed by the presentation of the results obtained. Finally, we will finish by discussing those results in the analysis section and introducing the conclusion of the study.

## **2 Theoretical framing**

### **2.1 Bilingual practices: code-switching and code-mixing**

Code-switching (CS) has been defined in many ways throughout the years, depending on the framework adopted and the research questions posed by the researcher. Gumperz (1982:59) defined it as the “juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems or subsystems”, which is a definition that is still upheld nowadays. However, we can find other definitions like the one offered by Amazouz et al (2017:62), which describes CS as “the process of switching from one language to another in the same conversational sequence” in “bilingual and multilingual communities”. Besides its many definitions, CS has been studied from two paradigmatically different points of view. On the one hand, we find several studies which have been considered to take a more grammatical approach i.e. focusing “on details of constituent structure” (Milroy and Muysken, 1995:9). On the other hand, we also find studies dealing with CS as an interactional phenomenon, that is to say, CS as a means of constructing and negotiating meanings among bilingual speakers.

An example of scholarly work dealing with grammatical CS is the Poplack and Sankoff model (1993), which presented two constraints that governed this process. The first one was the ‘free-morpheme constraint’, which stipulates that CS cannot happen between a lexical stem and a bound morpheme because that would be considered a process of borrowing instead. However, Auer (1998) argued against this by ratifying switches within a word as CS and naming them ‘intra-word switching’. This concept will be discussed below. The second constraint proposed by Poplack and Sankoff was the

‘equivalence constraint’, which proved to be the most problematic claim of the two. According to the equivalence constraint, CS can be predicted to occur only in contexts where the sentence structure of the two separate grammars coincide. Examples (1) and (2) below would not be grammatical because the grammars of Spanish and English do not coincide in the setting of the head-parameter. In Spanish, adjectives follow nouns, and in English, nouns are preceded by adjectives. However, this constraint has been criticized by several scholars (cf. Belazi et al, 1994) for not being sufficiently restrictive in actual speech, for both those examples below are attested in bilingual speakers of English and Spanish.

(1) \*The girl bonita.

(2) \*La pretty chica.

Before the emergence of interactional CS, the phenomenon of CS was seen by many authors (Haugen, 1950; Weinreich, 1953; Ferguson, 1959), as resulting from a “deficient knowledge of language” and a “grammarless mixture of two codes” (Milroy and Muysken, 1995:9). However, Gumperz (1982a, 1982b) brought up the idea that CS was a resource used by bilingual speakers to express a long list of possible rhetorical and social meanings. Along with Blom (1986), they later contributed to the field with the concepts of ‘situational CS’ and ‘metaphorical CS’. As described in their work, ‘situational CS’ applies in a situation in which switching codes means a change in the sociolinguistic norms governing the speech event such as changing the topic or the tone of the conversation or addressing another participant. ‘Metaphorical CS’ refers to situations in which the switch of code means no shift in the sociolinguistic context, but instead it provides a metalinguistic comment on a particular situation. Metaphorical CS is what is sometimes considered to be code-mixing in present research, although some

scholars equate code-mixing with CS. These concepts, though considered too general nowadays, paved the way for studies of CS being undertaken today.

Another crucial contribution Gumperz (1982) made to the field of interactional sociolinguistics, which was useful to the study of CS, was the concept of the ‘contextualization cue’. To put it simply, contextualization cues are signaling mechanisms, linguistic or paralinguistic, that are constantly used during communication to inform the listeners of how we want them to perceive what we say and of speakers’ intentions behind their words. This notion obviously assumes a homogenous meaning-making that is shared by all the participants, since a contextualization cue that is not shared can cause misunderstandings. Gumperz considered CS to be a contextualization cue, because it elicits a shared understanding of what using a code or another means to both participants and what the intentions in using that particular code are. A similar idea was put forth by Auer (1998), who considered CS to be a device to organize conversations. This study, along with the ones that will be presented in this section deal with bilingual practices in the offline world, but it is worth noting that this idea of CS being a contextualization cue will also be applied to the online world, like in the case of Georgakopoulou’s (1997) study on Greek and English in e-mail discourse.

Finally, we would like to introduce an important concept that has been considered to be halfway between grammatical and interactional CS, the ‘matrix language frame model’ by Myers-Scotton (1993), also shared by Auer (1998), who proposed that in the process of CS we can find a matrix or dominant language within which an embedded or subordinate language introduces variation.

(3) ¿Y eso? Why so little?

(4) Son buenos books.

(5) Estoy struggleando con esto.

This was later complemented by the division of bilingual practices by Auer (1998), who summarizes three crucial concepts in the field: inter-sentential switching, that involves switching between clauses or utterances (3); intra-sentential switching, when CS occurs within the same clause (4); and intra-word switching, when switching occurs within the same word (5).

Before proceeding to the next section, it is worth mentioning the more recent concept of translanguaging (Garcia et al, 2015). This is a concept that refers to the social use of more than one language in a particular context and it has its origins in pedagogical environments, where it is most commonly used.

## 2.2 Bilingual practices in computer-mediated communication

Computer-mediated communication (CMC) constitutes any act of communication between two humans through an electronic device. Scholars in the literature dealing with the subject show agreement among CMC models providing endless opportunities for the emergence of new forms of discourse, including CS.

CMC consists of different modes, that is, the online platforms in which the communicative event takes place. There are several classifications that can help us characterize each mode, but Herring's (2007) scheme, adapted from Hymes' (1974) ethnography model, seems to be the most useful one for this study.

**Table 1** - Medium and situational factors to characterize modes

<i>Medium factors</i>	Synchrony	Asynchronous or synchronous
	Message transmission	One-to-one, one-to-many, many-to-many
	Persistence of the transcript	Ephemeral or archived
	Channels of communication	Amount of text conveyed
	Privacy settings	Public, semi-public, semi-private, private
	Anonymous	To what extent are users' identities represented?



	Message format	Architectures for displaying interactions.
<i>Situational factors</i>	Participant structure	Number of participants involved
	Participant characteristics	Their own statements about their own ideologies and others' assumptions
	Purpose	Goals of the interaction (individual and group)
	Topic	Subject
	Tone	Formal or informal
	Norms	Accepted practices that the group shares
	Code	Language variety, choice of code

**Source:** Herring, S. (2007). A Faceted Classification Scheme for Computer-Mediated Discourse, adapted from Barton, D., Page, R., Wolfgang, J., and Zappavigna, M. (2014). *Researching Language and Social Media: A Student Guide*. London: Routledge: pp. 11.

Very often scholars erroneously look at the productivity of CS in the online world in terms of its similarities to CS in face-to-face interaction. This has been referred to as the 'synchronicity hypothesis' (Lee, 2007; Dorleijn and Nortier, 2009), by which synchronous modes will have more productive instances of CS than asynchronous modes. However, Androutsopoulos (2011) among others, finds that bilingual practices online are specific to CMC, and not mere reproductions of real-life interactions and therefore, they should not be examined in terms of their similarity to everyday speech but rather as a unique resource used in CMC.

Notice that when describing participants of a CM event, Herring uses the traditional account of one-to-one, one-to-many or many-to-many. This has been pointed out for being redundant by scholars like Androutsopoulos (2011), who suggests the terms private and public should be used instead. On the one hand, public CMC would consist of delivering a message online to an unknown user or users. In this type of communication, the presence of listeners or lurkers (Hutchby, 2006), that is to say, the users who are not addressed, but rather just observe the communicative event, might affect the speaker's response such as cases accounted for in the audience design (Bell, 1984). In relation to bilingual practices, this might have one of two outcomes according

to Androutsopoulos (2011): the allowance of more productive CS, or the marginalization of minority languages in favor of a dominant language such as English (Paolillo, 1996). On the other hand, private CMC consists of communicating with known users who share a common background with the speaker, which might derive in freer processes of CS. However, we will use the traditional account for this study as it is more complete.

In this study, we will be focusing on three modes: WhatsApp, Instagram, and Twitter. In order to give the reader a general idea of each platform, Herring's (2007) abovementioned descriptive criteria will be used to explain the characteristics of each one, though it is important to bear in mind that each social media use is mainly constructed by the use that each user gives to it and what the possibilities of what that social media can be used for i.e. affordances, so a mere list of the medium factors is not enough. Instead, taking in account the situational factors at the time of the study is also of great importance. It is worth noting that the three platforms that I have chosen are highly under-researched with respect to the bilingual practices that take place on them.

## **2.3 Platforms**

In this next section, we will introduce the three platforms on which our research will take place: WhatsApp, Instagram and Twitter. The presentation of the medium characteristics of each one of them will give the reader an idea of the kind of communication that takes place on them and will help understand the reason why these particular mediums are relevant to the present study.

### **2.3.1 WhatsApp, Instant Messaging (IM)**

WhatsApp is a mobile app for instant messaging that requires the users to have previously accepted to exchange phone numbers, thus making it different from any other IM service that is meant to meet new people in that the relationships between users are

expected to be more close-knit. In Table 2 we will go over the medium characteristics of this platform.

**Table 2 - WhatsApp medium factors**

<i>Medium factors</i>	Synchronity	Asynchronous and synchronous
	Message transmission	One-to-one or one-to-many
	Persistence of the transcript	Ephemeral (optional), archived
	Channels of communication	65,536 characters
	Privacy settings	Private
	Anonymous	User dependent
	Message format	Multimodal (text, links, emojis, pictures, GIFs, files, and videos)

**Source:** Herring, S. (2007). A Faceted Classification Scheme for Computer-Mediated Discourse., adapted from Barton, D., Page, R., Wolfgang, J., and Zappavigna, M. (2014). *Researching Language and Social Media: A Student Guide*. London: Routledge: pp. 11.

Messages can be synchronous, if two or more users are online while the communicative event takes place, or asynchronous, if one of the users to whom the message is directed is not online at the moment of receiving it. The transmission of messages can be either one-to-one, which would be the case for private conversations between two users, or one-to-many, which would be the case for messages sent by a user to a group chat. All WhatsApp messages, sent and received, are archived. If a user deletes a conversation or a chat history, the recipients will still be in possession of it. WhatsApp recently added the option of manually deleting one's individual messages or groups of messages from the recipient's archive as well, leaving a message that reads "this message has been deleted" where the original message used to be. This option is available to every user. The maximum length for a single message is very long, up to 65,536 characters. WhatsApp can be considered to be private, because only users with access to another user's mobile phone will be able to start a conversation with them and, even then, they have to be accepted. However, as I already mentioned, participants' use of a social media

makes each platform different for every user. Regarding identities, WhatsApp allows for a profile picture, which will be of themselves in the case of all the participants in this study; and to add a name or an alias that contacts will see when they do not have that user saved with the particular name of their choice. Again, some users rather use a nickname for their display name or a picture that does not show themselves, but it is not the case with the participants in this study. Lastly, the message mode has the possibility of being emojis, pictures, videos, files, or Graphic Interchange Formats (GIFs). Texts, links and emojis can be sent in the same message with pictures, videos, or GIFs. Files are sent in individual messages.

WhatsApp does not appear to have been the primary subject of any published study dealing with bilingual practices on social media, although it has been taken up in studies dealing with English Language Acquisition, in which WhatsApp is introduced as a language learning tool. The only mention of language variation on this particular medium has been by Pérez-Sabater (2015). Nevertheless, her study deals with the implementation of a project to encourage students to do research on online language used in WhatsApp messages, so the study's focus is not on language variation itself. However, WhatsApp is not particularly innovative in some respects, in the sense that we can find other platforms that can be considered similar to it and can help us get an idea of the research related to Instant Messaging (IM). An example of a study would be Lee's (2007) account of the linguistic features of ICQ (a play of words with the expression *I seek you*) in Hong Kong. ICQ is similar to WhatsApp in being an IM app in which users can chat, send asynchronous or synchronous text messages, links or images. However, the messages can only be 450 characters long and users can actually chat with people they have not met and choose the alias the recipient will see them as, whereas on WhatsApp, the recipient can choose the name with which they want to save the contact. This makes this particular

platform of social media different in a crucial aspect that involves the relationship between the participants of the event. As expected by the researchers, the students from Hong Kong used English most with people they had not met, and they argued it was because they saw English as being a language that everyone could understand. The lack of sociolinguistic research that relates to the particular nature of language use in WhatsApp hinders the task of putting it in a frame of previous research.

### 2.3.2 Instagram, photo and video sharing website/app

Instagram is a social media that allows users to share photos and videos that may or not be accompanied with a caption. In Table 3 we will go over the medium characteristics of this platform.

**Table 3 - Instagram medium factors**

<i>Medium factors</i>	Synchronity	Asynchronous
	Message transmission	One-to-many
	Persistence of the transcript	Archived
	Channels of communication	Captions can be 2,200 characters
	Privacy settings	Private or public
	Anonymous	User dependent
	Message format	Multimodal (pictures or videos, and text with optional emojis)

**Source:** Herring, S. (2007). A Faceted Classification Scheme for Computer-Mediated Discourse, adapted from Barton, D., Page, R., Wolfgang, J., and Zappavigna, M. (2014). *Researching Language and Social Media: A Student Guide*. London: Routledge: pp. 11.

The posts made by a particular user are asynchronous and transmitted from one-to-many, that is, to that user's followers. All posts are archived, unless the user deletes them which then deletes it also from any other user's feed. The website/app is picture or video-focused, but it allows for an optional caption, which is the text that appears below the photo or video. The captions can have a maximum of 2,200 characters and they can include emojis but not links. The privacy settings are user dependent, because Instagram allows for a customized setting of the account in that respect. Users with public accounts

can choose to allow anyone to follow them, or rather receive a message to confirm or delete follower requests with a private account. The extent to which their identities are stated is a user's choice, depending on the pictures and information that the users choose to disclose. Lastly, the message format, as explained, is multimodal; pictures or videos with an optional caption that may contain emojis but not links.

As in the case of WhatsApp, Instagram has been researched in terms of it being a possible learning tool but not with the focus on language variation or sociolinguistics in general. As in the case of WhatsApp, where we find a similar site that can help us get an idea of the literature behind it, there is a similar site to Instagram called Flickr. The differences between the two sites seem to be the user's perceptions of them. Flickr is mostly used for professional pictures, art, and videos that rarely have a caption on them, while Instagram is most generally used to share personal pictures and videos. Either way, due to the similarity of their formats, it is worth looking at a study by Barton and Lee (2011) that deals with identity-forming through multilingualism on Flickr by analyzing the content of 100 Flickr Chinese and Spanish users. Their findings showed that the users' language choice depends on their assumed audience, the content of the pictures, the affordances of Flickr and the linguistic ecology.

### **2.3.3 Twitter, short-text sharing website/app**

Twitter is a social media in which users share short messages, - referred to as tweets- pictures, or videos that can be retweeted and thus shared across the whole world because a user will retweet someone's tweet to their followers and those followers might do the same to their own followers so the reach a single tweet can have is very wide. It is currently one of the most effective social medias in terms of globalization and viral posts. In Table 4 we will go over the medium characteristics of this platform.

**Table 4 - Twitter medium factors**

<i>Medium factors</i>	Synchronity	Asynchronous
	Message transmission	One-to-many
	Persistence of the transcript	Archived
	Channels of communication	280 characters
	Privacy settings	Private or public
	Anonymous	User dependent
	Message format	Multimodal (pictures, GIFs, videos, text, emojis, and links)

**Source:** Herring, S. (2007). A Faceted Classification Scheme for Computer-Mediated Discourse., adapted from Barton, D., Page, R., Wolfgang, J., and Zappavigna, M. (2014). *Researching Language and Social Media: A Student Guide*. London: Routledge: pp. 11.

Tweets are asynchronous and are transmitted from one-to-many, that is to say, from one user to his followers and, if retweeted, his followers' followers. This is an important consideration to bear in mind because the wide reach a single tweet can have will most definitely be a variable that will affect the code a bilingual chooses. If a user decides to post a tweet that they expect will be retweeted many times and have a big reach, they will probably be typed in a language that they believe will be understood by most people. Tweets are archived, unless the user deletes any of them, which would make it disappear from the other users' feeds. They can be a maximum of 280 characters, thus requiring its messages to be very short which, in turn, requires the users to be concise with their choice of words. Similar to Instagram, Twitter allows users to accept anyone to follow them or to receive a message to accept or delete follow requests with private accounts. Once again, the extent to which users disclose their identity depends on the user. One user can choose to have their real name as a display name or use a nickname instead, similarly to profile pictures which can be an actual picture of the user, or a picture of the user that does not show their face or just a picture of somebody else. Lastly, the message format has the availability of being multimodal i.e. combining different semiotic

systems. A tweet allows pictures, videos or GIFs. Either way, tweets most usually consist of just text.

As it is the pattern with the social medias presented up until now, research on Twitter from a sociolinguistic perspective is limited. Kim et al. (2014) present a large-scale study concerned with whether local languages are dismissed in favor of an international language on twitter, taking English as the lingua franca of the medium, and constraining the patterns of CS users adopt. They collected Twitter data, including tweets and friends/follower lists, from Switzerland and Qatar, as well as from Quebec. Their findings showed an interesting ratio of code-mixing by users is very closely related with the language spoken by the mix of their followers. This means that users would be aware of the languages spoken by their followers and would mix those languages in the posts. Also, a very significant fact is that bilinguals express informative, political and debatable topics in their local language, whereas event, and enjoyment topics are written in English.

## **2.4 Contexts for bilingualism on social media**

A vast majority of studies deal with bilingual practices where the languages involved are a majority and minority language, which from a sociolinguistic point of view can be considered akin to the context of a speech community. A good example would be Hinrich's (2006) study on CS between Jamaican Creole and English in CMC.

In this study, however, we will be dealing with bilingual practices online taken up as a community of practice (Lave and Wenger, 1991) i.e., a group of people who come together to undertake a joint activity on a regular basis and as an outcome, they develop a particular way of speaking that they share. A very fitting example is the research dealing with the emails exchanged between Greek and English bilingual scholars who work together in the same Humanities Department (Tsiplakou, 2009). The study consists in the analysis of a small corpus of sixty randomly selected emails, along with brief informal



interviews and participant observation. The conclusion of the study was that CS was used to mitigate acts or emblematically to create ingroup solidarity. Because they form part of the same community of practice, the participants share similar identities formed by linguistic awareness and interest for literacy. The author concludes by saying that the reason why the two languages are hybridized is because they are performing their identities as ‘highly literate’.

### **3 Methods**

This study analyzes sixty-two WhatsApp group conversations containing CS by four Spanish students of English Philology, two men and two women in their early twenties, and thirty-eight random conversations from these four participants with people not related to the degree program. Additionally, a hundred and fifty tweets and Instagram posts from the participants will be analyzed. All the tokens will be collected randomly from messages, tweets or posts dating from April 2017 up to the end of April 2019.

#### **3.1 Relevant information**

This particular WhatsApp group understudy was created in January 2016, three years prior to this study. It was created after the participants had met for the first time in person at university and constituted themselves as a real-life group. This brought about the exchange of phone numbers in order to discuss questions and issues related to the degree and also to have personal and friendly exchanges. The WhatsApp group that we will analyze is not merely a students peer group, but also a friends social group so both roles have to be taken into account. For this reason, as is the case with Participant A, some conversations will be private between the researcher and the participant. Since the relationship between the participants remains the same whether they are in the group chat or not, as will be seen by the use of CS to each other on Twitter, exclusively using conversations from the group chat is not necessary.

We would also like to make the remark that the region of Spain in which the study is undertaken is fully bilingual in Spanish and Catalan. However, it is common to find people who either prefer speaking Catalan or Spanish because it is the language spoken at home and the one they are most comfortable with. This group in particular switches between Spanish and English and not Catalan and English because Spanish was the language with which participants A, B and C introduced themselves to the group and thus, participant D adapted to that language.

### **3.2 Participants**

The participants of this study are four students, two women and two men, between 21 and 26 years. All four participants are in their fourth and last year at university, where they are pursuing a degree in English Philology at the Autonomous University of Barcelona in Spain. Consequently, their level of English ranges from advanced to proficient. In the next subsections, we will introduce each participant's background, considering their place of birth, the gender they identify with, their age, their mother tongue, the second languages they speak and when and how they were acquired, and if they consider they use English as a means of personal expression. We will also consider the extent of self-representations on Twitter and Instagram. Notice that in section 4.2.4 Participant D provides information about myself, the author of this research.

#### **3.2.1 Participant A**

*Place of birth:* Terrassa, Spain.

*Gender:* Male

*Age:* 25

*Mother tongue/s:* Spanish and Catalan

*Second language/s:* English

*Manner of acquisition:* Exposure through texts and audiovisual media (especially video games), school

*Languages of education:* Spanish, Catalan, English

*Do you use English as a means of personal expression i.e. dreaming, thinking, swearing, diary writing, praying in English, constituting the internal functions of language coined by Mackey (2000)?* Yes, in occasional swearing.

*How many hours a day would you say you're exposed to English?* Between 10 and 15.

Participant A does not have an Instagram or Twitter profile.

### **3.2.2 Participant B**

*Place of birth:* Sabadell, Spain.

*Gender:* Male

*Age:* 22

*Mother tongue/s:* Spanish and Catalan

*Second language/s:* English, German

*Manner of acquisition:* Exposure through texts and audiovisual media, school and academy.

*Languages of education:* Spanish, Catalan, English

*Do you use English as a means of personal expression i.e. dreaming, thinking, swearing, diary writing, praying in English (Mackey, 2000)?* Yes.

*How many hours a day would you say you're exposed to English?* 12 hours a day approximately.

*Extent of self-representation on WhatsApp:* Real picture as profile picture and first name as display name.

*Extent of self-representation on Twitter:* Real picture as profile picture and first name as display name.

*Public or private profile on Twitter:* Public profile

*Extent of self-representation on Instagram:* Real picture as profile picture and first name as a display name. The pictures posted are of himself and people in his circle.

*Public or private profile on Instagram:* Public profile

### **3.2.3 Participant C**

*Place of birth:* Barcelona, Spain.

*Gender:* Female

*Age:* 24

*Mother tongue/s:* Spanish and Catalan

*Second language/s:* English

*Manner of acquisition:* Exposure through texts and audiovisual media school.

*Languages of education:* Spanish, Catalan, English

*Do you use English as a means of personal expression i.e. dreaming, thinking, swearing, diary writing, praying in English (Mackey, 2000)?* Yes.

*How many hours a day would you say you're exposed to English?* 10 hours a day approximately.

*Extent of self-representation on WhatsApp:* Real picture as profile picture and first name as display name.

*Extent of self-representation on Twitter:* Real picture as profile picture and first name as display name.

*Public or private profile on Twitter:* Public profile

*Extent of self-representation on Instagram:* Real picture as profile picture and first name as a display name. The pictures posted are of herself and people in her circle.

*Public or private profile on Instagram:* Public profile

### **3.2.4 Participant D**

*Place of birth:* Terrassa, Spain

*Gender:* Female

*Age:* 21

*Mother tongue/s:* Catalan and Spanish

*Second language/s:* English

*Manner of acquisition:* Explicit in school. Exposure through audiovisual media.

*Languages of education:* Catalan and Spanish; English at university.

*Do you use English as a means of personal expression i.e. dreaming, thinking, swearing, diary writing, praying in English (Mackey, 2000)?* Yes, very often I think, talk to myself, swear, pray and write personal documents in English.

*How many hours a day would you say you're exposed to English?* Approximately 7 hours a day, with university lessons along with English videos and series I watch and video games in English I play in my leisure time.

*Extent of self-representation on WhatsApp:* Real picture as profile picture and first name as display name.

*Extent of self-representation on Twitter:* Real picture as profile picture and first name as display name.

*Public or private profile on Twitter:* Public profile

*Extent of self-representation on Instagram:* Real picture as profile picture and first name as a display name. The pictures posted are of myself and people in my circle.

*Public or private profile on Instagram:* Private profile (only those that are accepted can see the pictures)

#### **4.3. Method of analysis**

As recommended by Barton et al (2014) for small corpus of qualitative research, the study will be carried out with the manual work of the researcher. The total of two hundred and fifty conversations and posts will be divided depending on the participants, which will be further subdivided into the platform and context in which they were gathered. Those contexts can either be a WhatsApp message sent to the group, a WhatsApp message sent to someone unconnected to the degree, a tweet or an Instagram post.

Each WhatsApp conversation will be carefully analyzed in terms of the topic that was being talked about, the function that CS might have had in that context and the shared meanings behind that particular use of CS. Tweets and Instagram posts will be also analyzed by using those terms, although in that case the expected audience of the post will also be of great relevance. By doing that, we intend to find out if there is a particular set of factors such as topic or audience that will help us predict the use of CS in the online

world. Additionally, the WhatsApp conversations with people in the group will be contrasted with the WhatsApp conversations with other people unconnected to the degree provided by the participants, with the intend of seeing if the extent of CS differs and, if it does, what are the reasons behind it.

## **4 Results**

In this section we will present the results that were obtained, dividing them by participant and medium so that they are more clearly understood. In general, the results were remarkably different for each participant and we will go deeper into trying to explain why in the next section.

### **4.1 Participant A**

Participant A could not provide us with a great amount of data, as he does not have a Twitter or Instagram account and his WhatsApp conversations are all with members of his family. However, through his contributions on the WhatsApp group and his private conversations with Participant D, we can observe some interesting aspects of his online speech.

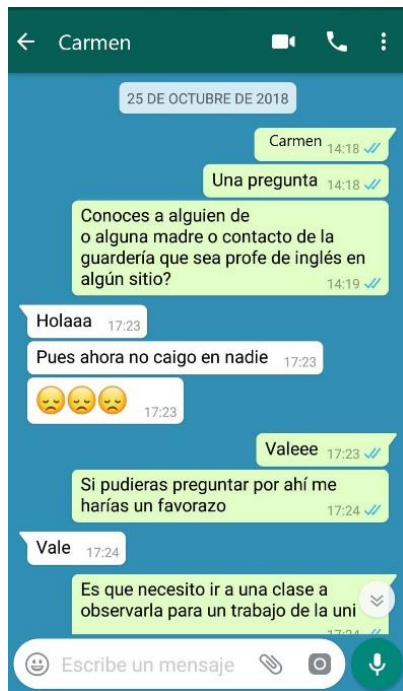
#### **4.1.1 WhatsApp conversations with people unconnected to the degree**

As we have already mentioned, Participant A provided us only with conversations with members of his family, such as his mother and his three cousins. In these conversations, green messages belong to Participant A. Either way, we can see that out of the eight conversations that were provided, none of them contain any trace of CS or inclusion of English words.<sup>1</sup>

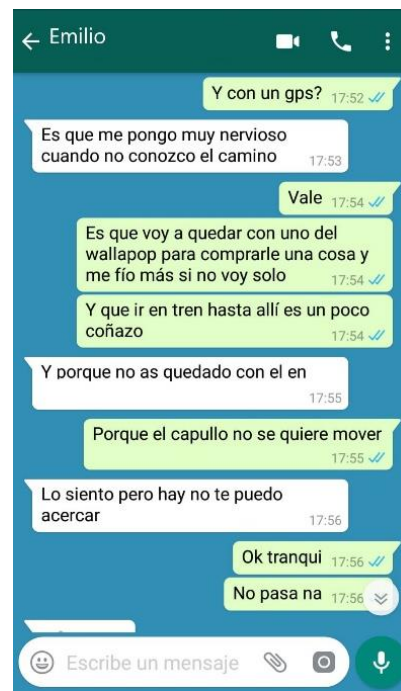
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<sup>1</sup> The expression “ok” is a borrowing that has been part of the Spanish language for many years, and which has been phonologically adapted to /’ok/. For the purposes of this paper, it will not be considered relevant to bilingual practices.

[Context: A conversation between Participant A and his cousin, who is a teacher.]



[Context: A conversation between Participant A and his cousin in which he asks him if he can give him a ride to meet up with a person who wants to buy something from him.]



#### 4.1.2 WhatsApp group

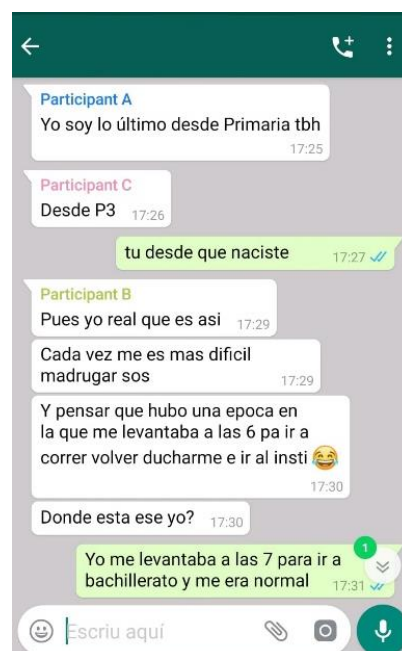
Out of the total of fifty WhatsApp group conversations that were collected, Participant A participates in five of them. CS or the inclusion of English abbreviations such as “tbh” occurs in three of the five conversations. In the two examples below, we can see a conversation with a more assertive tone in which CS is not present, and a light-hearted conversation in which he includes an English expression. Please keep in mind that in the following sets of messages, green ones belong to Participant D.



Context: Participant A, B and D discuss whether to go to a karaoke for Participant B's birthday or not.]



[Context: Participant D shares a tweet saying that we wake up very early all throughout high school without a problem and at university it is much more difficult to wake up early.]



### 4.1.3 Private conversations between Participant A and D

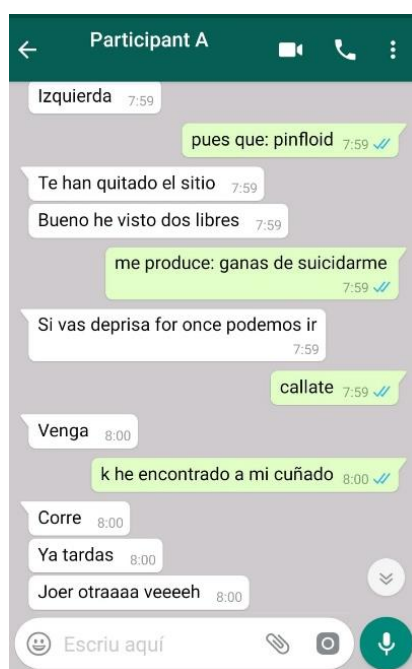
In the twelve conversations collected between Participant A and D, we can see various contexts that are worth mentioning. Firstly, the use of English because the material being referenced is in English. This would be the case in the example below, in which Participant A and D are referencing an online quiz they are taking. It could be considered they are quoting parts of the questions or answers provided.

[Context: Participant D asks Participant A for help on an online quiz they both have to do.]

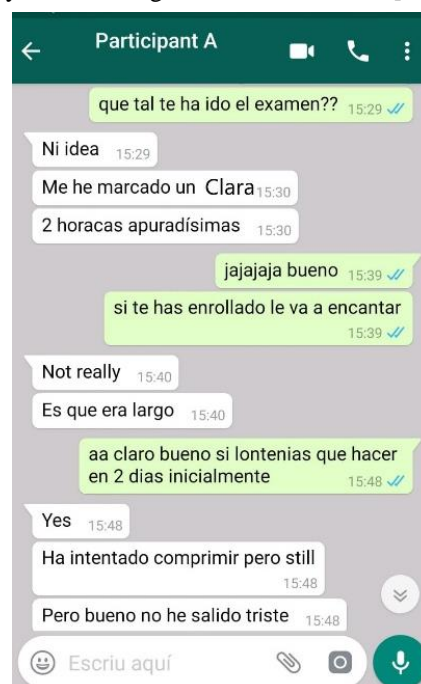


Secondly, we find two situations in which full English expressions are used. As we can see in the examples below, Participant A chooses to use the English code in full expressions instead of the Spanish equivalent.

[Context: Participant A and D are texting while trying to find each other on the train.]

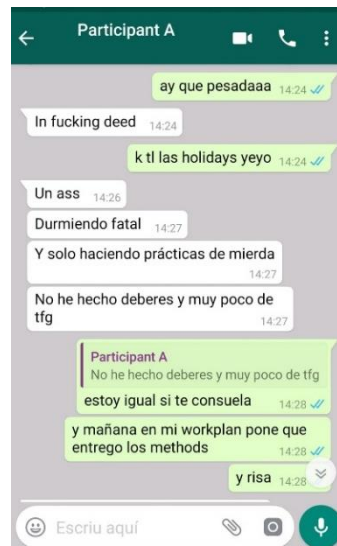


[Context: Participant A refers to a common friend who is also part of the group and who always takes a long time to finish exams.]



Finally, as will be common in this paper, we find English words used as insults or swear words. We will see this phenomenon get repeated several times through the results section.

[Context: Participant D asks Participant D about his Easter holidays.]



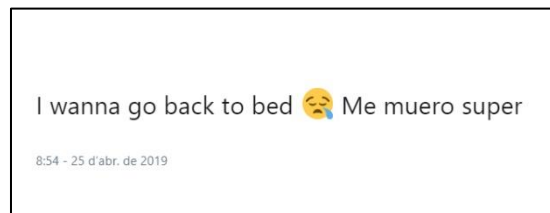
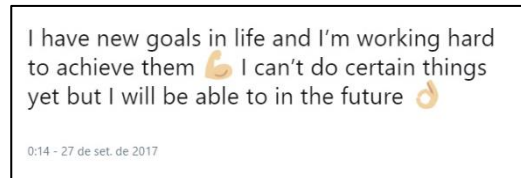
As a note before we continue to Participant B, we see that Participant A uses the word “pinfloid” many times in his conversations, and we will see it is a recurring word in the WhatsApp group as well. This word is an insult, with a meaning similar to “idiot” that is quite popular among the Spanish youth and that is very common in the WhatsApp group.

## 4.2 Participant B

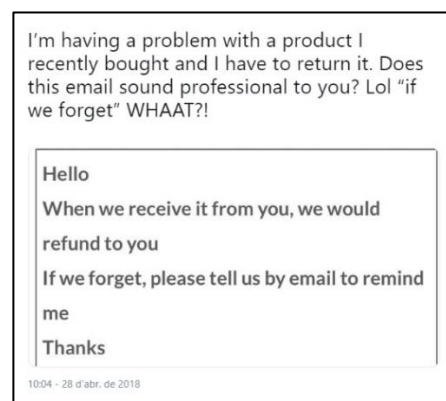
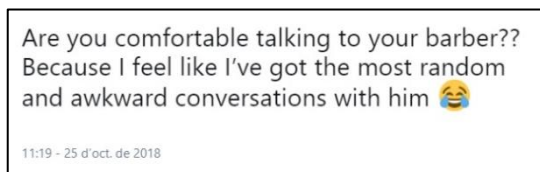
Participant B is a very interesting case, because his choice of code varies enormously across platforms. We will start by looking at Twitter and Instagram, before proceeding to WhatsApp messages with people unconnected to the degree. Lastly, we will look at his contributions to the WhatsApp group conversations.

#### 4.2.1 Tweets

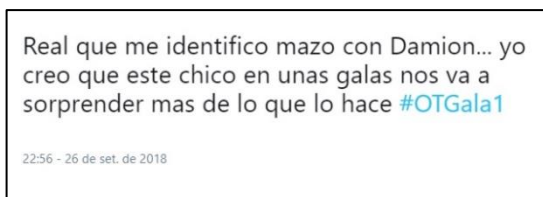
Participant B's tweets, in general, resemble diary writing and personal expression. In this category of tweets, we find they are either fully written in English or in Spanish, except in one case. In this case we find a case of intra-sentential CS.



When directing himself to his “audience” or his followers in general, Participant B uses the English code fully, without any bilingual practices of any kind. We can find two examples of this phenomenon below, in which his followers are addressed to directly with questions.



When discussing topics related to Spanish pop culture or, in this case, topics related to Spanish TV programs, Participant B uses Spanish.



We can see in the first example above that the first tweet contains a hashtag, which describes the general subject of a post and allows other users to find your tweet by looking up that hashtag. By adding the hashtag, Participant B makes himself part of a discussion that is carried out and dominated by the Spanish language.

Very interestingly, we find that a direct interaction with Participant C, like the one below, is carried out in Spanish, while a direct interaction with an English-speaking celebrity is also carried out in Spanish. In both cases, the original tweets were written in English and Participant B responds in Spanish.



#### 4.2.2 Instagram posts

As we will exemplify now, the general mood of Participant B's Instagram differs greatly from Twitter. While in Twitter we find many tweets relating to his private life,

worries and the expression of his feelings, Instagram captions have a more upbeat and positive tone. All of the 25 captions collected are written in English.

[Photo description: A picture of Participant B posing. The censored username belongs to a friend of his.]

[Photo description: A picture of Participant B in front of a building. The censored username belongs to a friend of his.]

Oh dear... it's been a while! 🙏  
Basically, I've been busy with a million of other things (and still am) apart from being in a non-creative mood. However, I'm feeling much more motivated now which is good! How's everything going for you tho?  
(📷 @ )  
9w

My obsession for architecture is still growing 🙌 What are the most interesting buildings in your city?  
(📷 @ )  
24w

In the two examples above we can see his Instagram captions very often have direct questions to his audience and, even if they express negative feelings, always end with a positive note. They resemble motivational quotes. It is important to remind ourselves of the fact that Participant B's Instagram account is public, which means anyone can see his pictures and follow him. Also, even though it cannot be shown in this paper, it is relevant to mention that his pictures follow what is known as a theme. This means that they all have similar color palettes, so that when you look at Participant B's profile, it is visually appealing.

#### 4.2.3 WhatsApp conversations with people unconnected to the degree

Participant B consistently uses Spanish in the 10 conversations we were provided, though there are some instances of English words and expressions that belong to two different contexts. Firstly, as we mentioned before with Participant A, we see the use of English to quote English references. In the two examples below, we can see that Participant B texts two different coworkers and they mention English concepts they both

have stored in their mental representations in English. In the second example, we can see Participant uses the word “yes”, instead of the Spanish equivalent “sí”.

[Context: A conversation between Participant B and a coworker in which he asks her for a website of reader exams they were told about in a work meeting before.]



[Context: A conversation between Participant B and a coworker in which they discuss what to do for an activity they have to craft as teachers.]



In a particular conversation with his mother, which you can see below, Participant B uses the expression “goals”. This word is very common among young people (monolingual and bilingual) in Spain. It has been borrowed because of a lack of a word that expresses the same meaning in Spanish.

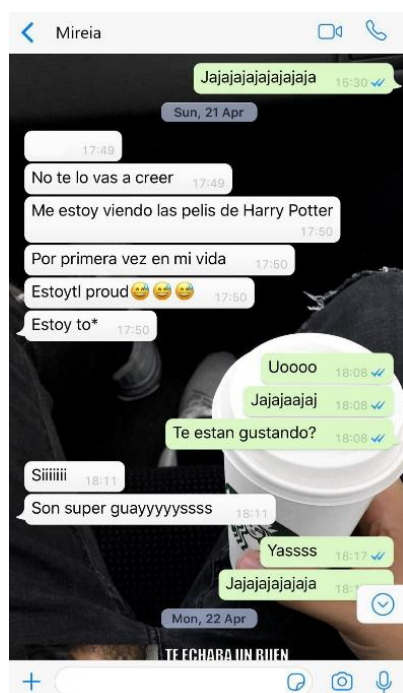


[Context: A conversation between Participant B and his mother.]



Elsewhere, in conversations with his brother and two of his friends, Participant B uses Spanish without any English words or expressions. Below you can see two examples of friendly conversations being carried out in only Spanish.

[Context: A conversation between Participant B and a friend.]



[Context: A conversation between Participant B and a friend, discussing if they can go buy a gift for a common friend whose birthday is coming up.]

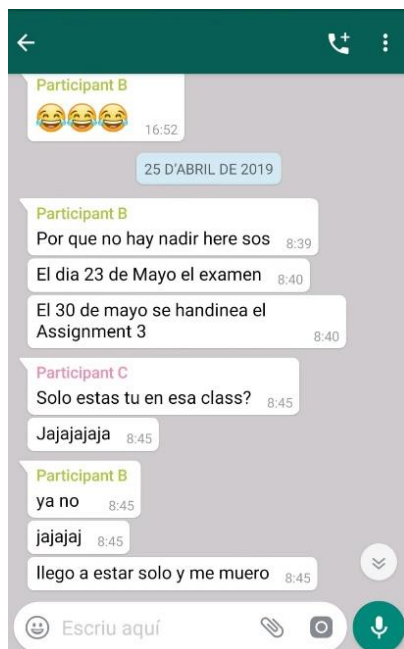




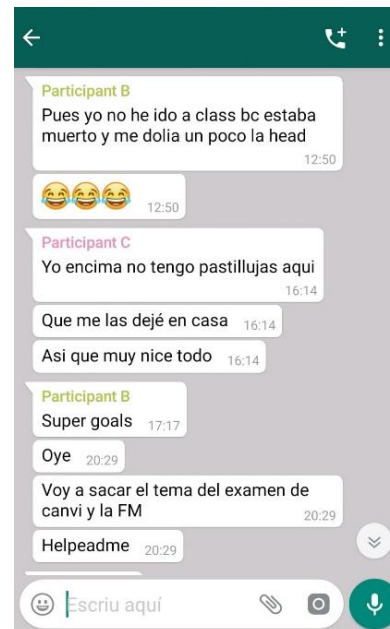
#### 4.2.4 WhatsApp group

In the conversations collected from the WhatsApp group, we can see Participant B uses code-switching quite often. Firstly, we find many instances of intra-word CS such as the ones found in the examples below. Keep in mind that in the following conversations, the green messages belong to Participant D.

[Context: Participant A, B and D go to this class together, but only Participant B is there at the moment it starts. He reports on what the teacher is saying at the moment]



[Context: Participant B and C are both feeling ill and they share how they feel. Participant B changes the topic. He tells the group he will send a message to the official group of the degree asking for a change of an exam that coincides with a faculty party and asks the group for support.]



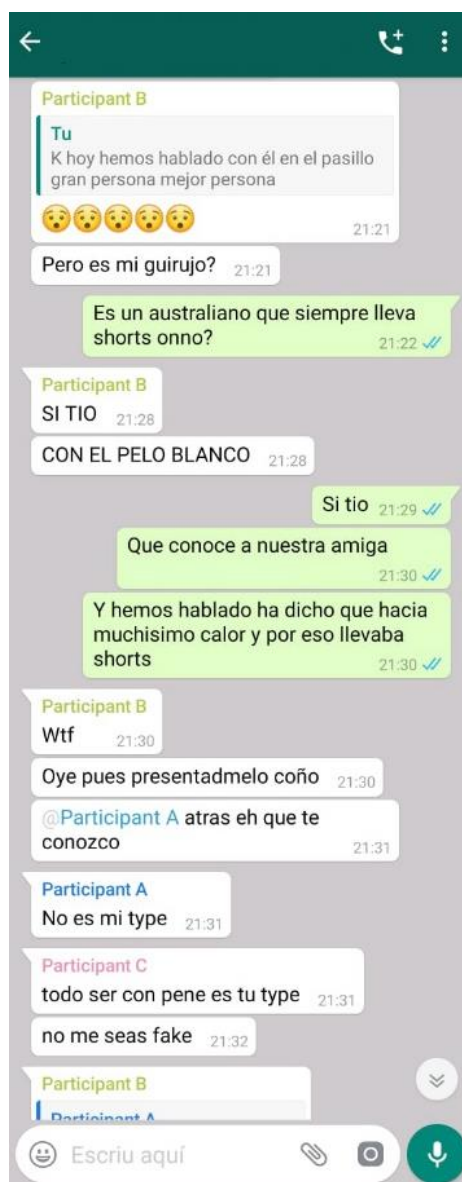
In the first example, it seems that Participant B is simultaneously translating what the teacher is saying, in English, to Spanish for the two participants who still have not arrived to class. In the second one, however, the choice of the word “help” with the Spanish imperative plural ending does not appear to be triggered by anything. It is also important to notice that, in this last example, we also see the use of the word “head” instead of the Spanish equivalent “cabeza”.

As much as Participant B's use of CS is very common in the WhatsApp group as opposed to in other contexts, we also find instances in which Spanish is exclusively the only language he uses. As can be seen in the examples below, Participant B does not make use of any English words or expressions.

[Context: Participant D shares a dream she had in which Participant B and C appeared.]



[Context: Participant A, B, C and D discuss an exchange student that Participant B likes.]



In both this cases, Participant B is addressing Participant D, who has sent messages in only Spanish. Nevertheless, quite interestingly, this does not happen with Participant C. As we can see in the example below, Participant C addresses him in

Spanish, to which he responds by repeating the same thing she said, “años”, but in English, “years”. Furthermore, he introduces the expression “I think” at the end, without any apparent trigger to the switch of code.

[Context: Participant B asks Participant A what she will do with the money she won by playing Bingo, and she says she’ll use it to pay for her braces. Participant B wears braces as well.]



### 4.3 Participant C

Participant C is the participant with the most instances of CS. We will start by looking at Twitter and Instagram, before proceeding to WhatsApp messages with people unconnected to the degree. Lastly, we will look at her contributions to the WhatsApp group conversations.

#### 4.3.1 Tweets

Firstly, what we notice about the use of English words in Participant C’s tweets is that they are very often used as insults. In the two examples below, we can see how the tweets are written in Spanish but only the swearwords appear to be translated to English.

Me da una pereza tremenda tener que mover el ass de la cama

11:56 - 27 de juny de 2017

Soy la única a la que le da pereza máxima este año la damn navidad????? Porque de verdad que ojalá ya mayo pls

15:38 - 24 de des. de 2018 des de Barcelona, Espanya

Tweets that are directed to the expression of feelings, without insults, are either written in English or in Spanish. In the examples below you can see two instances of Participant C using Twitter as a sort of diary.

I didn't know I hated poetry until I had to take a whole subject dedicated to it. Fucking hell if this shit isn't boring af

12:39 - 22 de febr. de 2019

Salgo de casa en menos de dos horas y todavía no tengo ni la maleta hecha. Define vagancia en su máximo estado 😂😂

6:12 - 3 de maig de 2018 des de Barcelona, Espanya

As we saw with Participant B, when participants refer to pop culture events or TV programs, they use the language in which that pop culture event is broadcasted. In the following examples we can see two important aspects. Firstly, that the tweet that expresses dislike for a TV program in Spain is fully written in Spanish, even the swearword. Secondly, the use of hashtags defines the desire to be part of an online discussion which is carried out in a particular language.

La verdad es que me tenéis lo que viene siendo un poquito hasta el coño con operación triunfo

17:16 - 26 de des. de 2017

Obviously #MTVHOTTEST Niall Horan  
Ma babe is a model after all

23:06 - 21 de jul. de 2018 des de Palma, Espanya

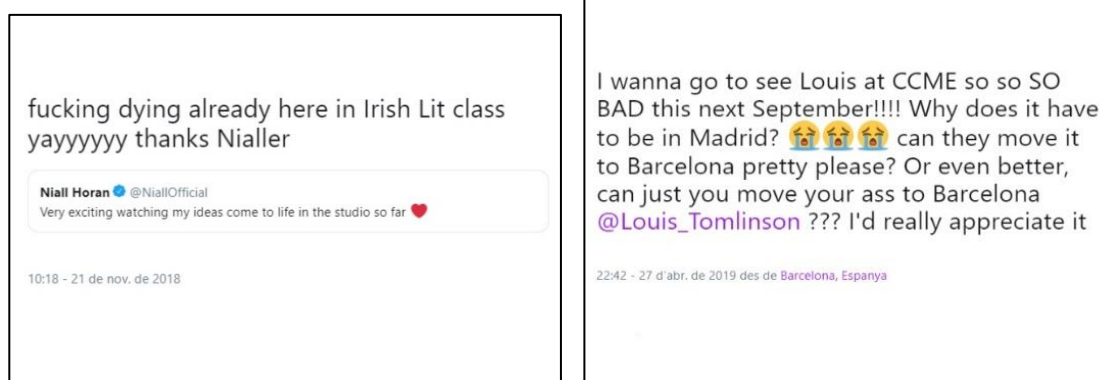
Deseando ver las reacciones de la gente al ver entrar a Miriam AJAJAJAJAJA  
FANTASIAAAAA AY AY AYYYY LA MONICA  
POLLOS COMO SE NOS VA A PONER  
#GHVIPGala3

23:24 - 27 de set. de 2018 des de Barcelona, Espanya

Before going to sleep I just wanted to say that I fucking love #Flicker from the beginning till the very end. Now, good night everybody.

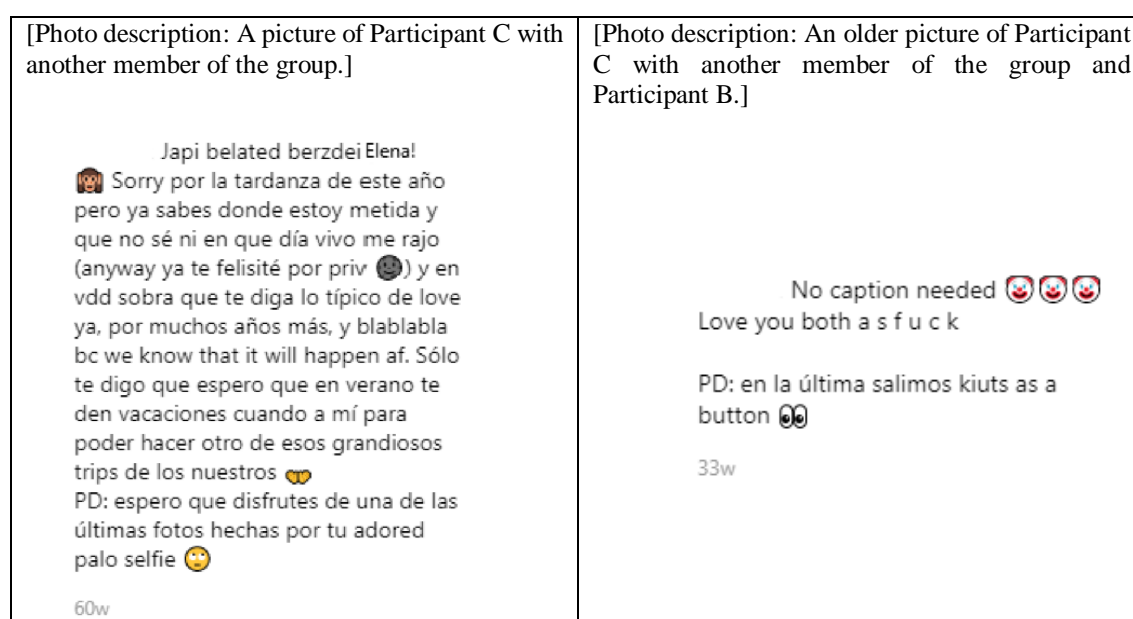
0:51 - 20 d'oct. de 2017

Finally, we see Participant C very often addresses English-speaking celebrities in English, which differs from the way Participant B addressed celebrity Dua Lipa in the previous section. In the following examples, we can see Participant C directly addressing Irish singer Niall Horan and British singer Louis Tomlinson.



#### 4.3.2 Instagram posts

In this section we will introduce a practice that seems to be very characteristic of Participant C, and that is using English words and expressions in a comedic way by writing them “as they sound” in Spanish. We can see two examples of that below, which are captions for pictures in which members of the group appeared.



Very interestingly, it seems to be the case that Participant C only uses CS in her captions when they are directed to someone from the group or when the picture above the caption contains someone from the group. Elsewhere, we can see either Spanish or English is used, as can be seen in the examples below.

<p>[Photo description: A picture of Participant C floating in the sea.]</p> <p>Really missing those beautiful places 🤔 and yep, that little thing drifting there it's me #mallorca</p> <p>40w</p>	<p>[Photo description: A picture of Participant C kissing her cat.]</p> <p>No te puedo querer más</p> <p>35w</p>
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Finally, similar to Twitter, we see that Participant C also directs some of her posts to English-speaking celebrities. In the two examples below, we can see how she addresses them directly as if it were a fan letter of sorts.

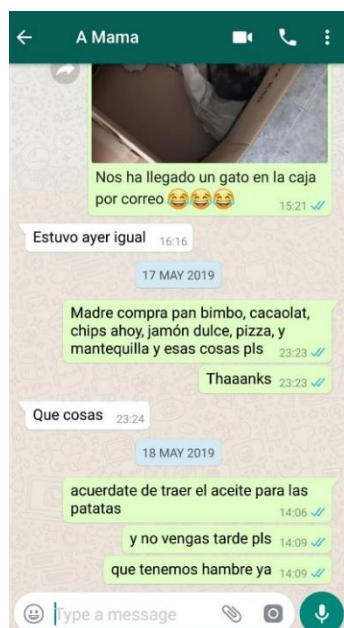
<p>[Photo description: A picture of Participant C with British singer Liam Payne.]</p> <p>Everybody that has been in my life (no matter if lots or not of time or for whatever reason) knows how much 1D and all their boys mean to me, so you can imagine how over the moon I'm still feeling because of this. I really don't know what to say but damn it, thanks Liam for that smile of yours. I love you with my whole heart @liampayne. Always ❤️</p> <p>54w</p>	<p>[Photo description: A picture of Participant C with Irish singer Niall Horan.]</p> <p>Cause if the whole world was watching I'd still dance with you... ❤️ I really cannot express with words the love I have for you @niallhoran, like srsly, it's something impossible to do. Again, thank you, thank you and thank you. Love you, always. #flickerworldtour2018 #Barcelona #NiallHoran</p> <p>54w</p>
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#### 4.3.3 WhatsApp conversations with people unconnected to the degree

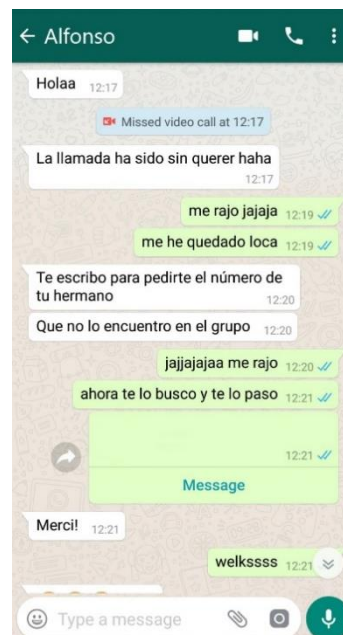
Participant C's use of English words in conversations with people unconnected to the degree is not too remarkable. We can see occasional uses of expressions such as "lol" or "wtf" that we could consider to be part of the global online language and not English per se, although their origin is English. However, we can notice the use of words such as "thanks" and "welks" in all-Spanish conversations such as the ones below.



[Context: A conversation between Participant C and her mother. Her mother is out shopping and Participant C asks her for things from the store.]



[Context: A conversation between Participant C and a coworker in which he asks her for her brother's number.]



We also notice Participant A substitutes common Spanish abbreviation such as “pk” instead of “porque”, for English abbreviations such as “bc” instead of “because”. This abbreviation seems to be quite integrated into her speech, as we will see it will appear again in the WhatsApp group messages.

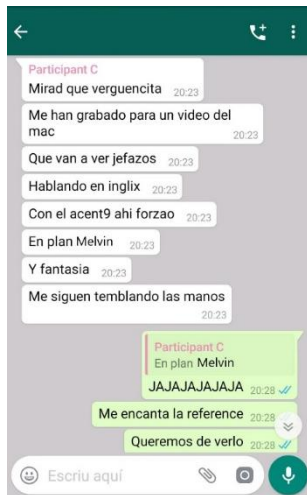
[Context: This is a WhatsApp group with two coworkers of hers and the topic being discussed is two suitcases Participant C and her brother had recently bought.]



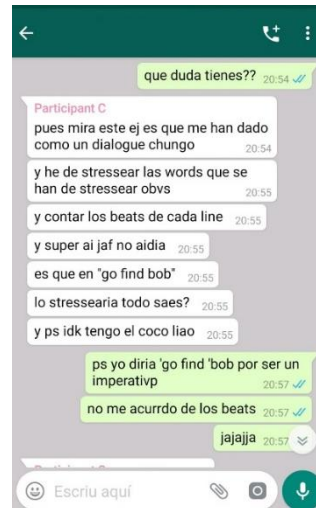
#### 4.3.4 WhatsApp group

As we mentioned in the previous section, Participant C tends to write English sentences “as they sound” in Spanish. In the following examples you can see Participant C using expressions such as “ai jaf no aidia” or “inglix”.

[Context: A conversation where Participant C mentions a classmate they collectively do not like and who forces a British accent when he speaks.]



[Context: Participant A asks the group for help on a phonetics assignment she has to do.]

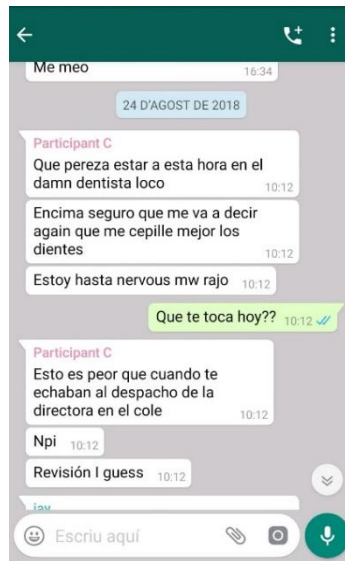


Notice that in the second example, Participant C is quoting directly from the assignment she has at hand, while adding Spanish infinitive and conditional suffixes to English verbs. This is a very interesting phenomenon, but it does not appear to be very common in the group conversations that have been collected.

As we also mentioned for tweets, Participant C tends to use English swearwords instead of Spanish ones. In the example below we can see another instance of Participant C using “damn”.



[Context: Participant A shares her feelings about going to the dentist, where she regularly goes.]



Finally, as can be seen extensively in APPENDIX B, Participant C constantly uses English words in her online speech. She very often substitutes Spanish content words for English ones, as can be seen in the following examples:

[Context: Participant C and D discuss what their graduation pictures were like.]



[Context: Participant C changes the previous topic to introduce a story about a fight she caused in her work's WhatsApp group.]

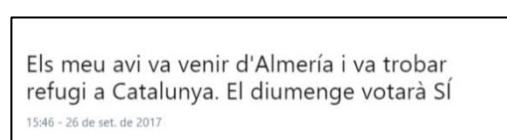


## 4.4 Participant D

In this next section, we will go over the results of myself as the researcher. We will start by looking at Twitter and Instagram, before proceeding to WhatsApp messages with people unconnected to the degree. Lastly, we will look at her contributions to the WhatsApp group conversations.

### 4.4.1 Tweets

Participant D is the only participant who makes use of the Catalan language in any of the contexts. In the following examples we see two instances in which the Catalan language is used, in both cases in the context of the political independence movement of which she is part of. The first tweet has a hashtag claiming the freedom of the Catalan political prisoners, which is related to the movement as well.



In a similar way, we see the use of Spanish to give political opinions related to her country, such as the ones we can see in the examples below. The first one is a modification of a famous poem by a German pastor called Martin Niemöller, which has become a very strong symbol of the indifference of the rest of Spain for the privation of freedoms by the Spanish government.

Primero fueron a por los catalanes...

12:27 - 27 d'oct. de 2017

#12deOctubreNadaQueCelebrar  
#12OResACelebrar ningún ser humano  
decente puede sentirse orgulloso del  
genocidio en masa que se llevó a cabo en las  
Américas.

14:34 - 12 d'oct. de 2018

Elsewhere, Participant D seems to be very consistent with using English to express her feelings and to share experiences. Similar to Participants B and C, Twitter is used as a diary by many people. In the following examples, we can see how the main language used for this mean is English.

can i get one balanced match on paladins or  
is that too much to ask

18:54 - 25 de gen. de 2019

I would love it if someone bought me a  
bouquet of flowers

0:15 - 28 de maig de 2017

I quite like scary video games




18:10 - 25 de gen. de 2018

Finally, as we have seen before, Participant D uses English when referring to English pop culture like TV shows or movies. As we have mentioned as well, very often a hashtag is used to declare herself part of the online discussion.

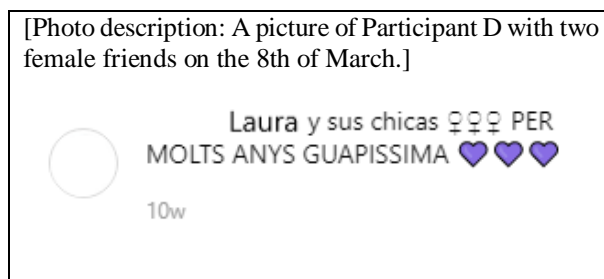
<p>OMG I THOUGHT YARA WAS GOING HOME AND I WAS SO PISSED. I'm sorry but Carmen is just so DULL. Granted, someone like Tyra won season 2 so that must not be that important. #RuPaulsDragRaceSeason3</p> <p>17:55 - 25 de juny de 2018</p>	<p>What? They DIDN'T LIKE ALYSSA'S SECRET? IT WAS HILARIOUS</p> <p>12:18 - 24 d'ag. de 2018</p>
<p>I would like the top 3 of this season of #DragRace to be Brooke, Yvie and A'keria ❤️</p> <p>23:19 - 27 d'abr. de 2019</p>	<p>COCO IS THE BEST DISNEY MOVIE</p> <p>16:13 - 27 de nov. de 2017</p>

#### 4.4.2 Instagram posts

In the case of Participant D, we find three of the twenty-five posts are written in Catalan. The first one has to do with the 1<sup>st</sup> of October, which is a topic related to the independence of Catalonia as it was the day the Catalan government carried out a referendum without the permission of the Spanish government. The other two captions are under pictures of Participant D with her paternal grandparents, who are Catalan speakers.

<p>[Content description: A video in which the ballot boxes of the 1st of October 2017 are taken out of the polling place.]</p> <p> URNES SALVADES</p> <p>85w</p>	<p>[Photo description: A picture of Participant D with her grandparents.]</p> <p> En els moments més difícils, quan sents ganes de rendir-te i de plorar sense parar a diari... la família sempre està allà♥️ Ja queda poc...</p> <p>6w</p>	<p>[Photo description: A picture of Participant D with her parents and grandparents.]</p> <p> La família és la fortalesa i la feblesa.</p> <p>31w</p>
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As for Spanish, we find one instance in which the caption is in half Spanish and half Catalan. This picture contains Participant D with two childhood friends on International Women's Day, which also is one of the friend's birthday.



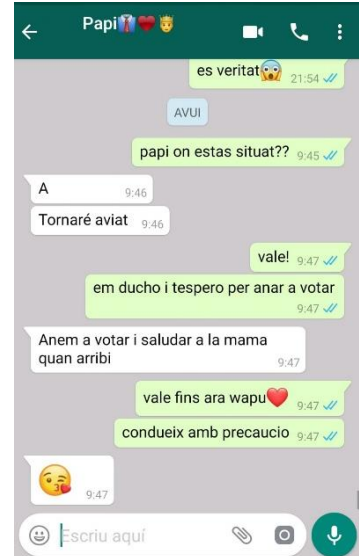
Elsewhere, we see that the rest of Instagram captions by Participant D are written in English. Even pictures in which other members of the group appear, which was the determining factor for the use of CS in the case of Participant C. In the examples below we can see how English is the predominant language in all sorts of pictures.

<p>[Photo description: A selfie of Participant D with her friends pointing to their composite picture.]</p>	<p>[Photo description: A picture of a pride flag with the hashtag “#pride” on it.]</p>
<p>[Photo description: A selfie of Participant D with Participant C.]</p>	<p>[Photo description: A selfie of Participant D with her sister and nephew at Disneyland Paris.]</p>

#### 4.4.3 WhatsApp conversations with people unconnected to the degree

The majority of the conversations with people unconnected to the degree are in Catalan, with slight additions of Spanish sometimes. As we can see in the examples below, in conversations with her mother, father and aunt, Participant D uses Catalan most of the time.

[Context: A conversation between Participant D and her father in which they are meeting up to go vote.]



[Context: A conversation between Participant D and a friend about the last episode of Game of Thrones.]

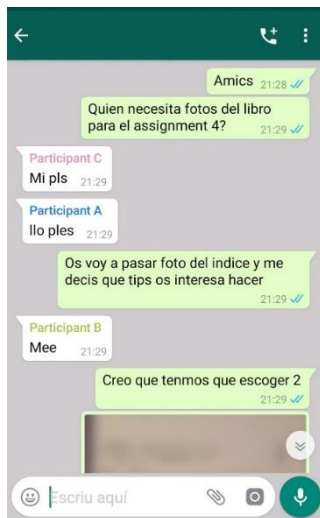


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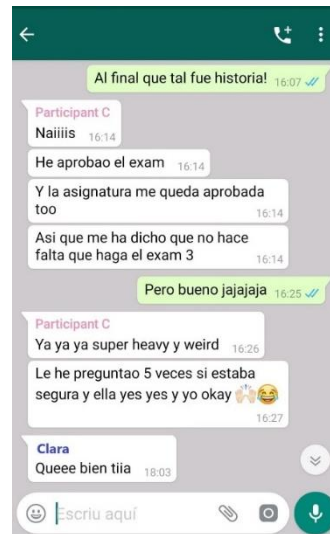
#### 4.4.4 WhatsApp group

As it seems to be the case with all participants, the amount of CS increases when the conversations take place on the group chat. Nevertheless, we also find many instances of messages fully written in Spanish. The following examples show messages fully written in Spanish, despite the other participants answering in English or using CS.

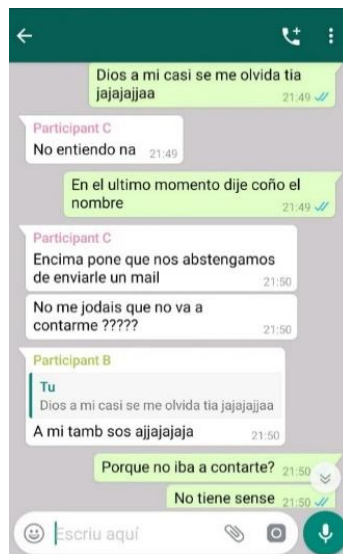
[Context: Participant D is the only one that has a book that is needed for an assignment, so she asks the group if they want pictures in order to do it.]



[Context: Participant A says the teacher has told her that she got a pass mark for a subject she is repeating, so she is allowed to skip the final exam.]

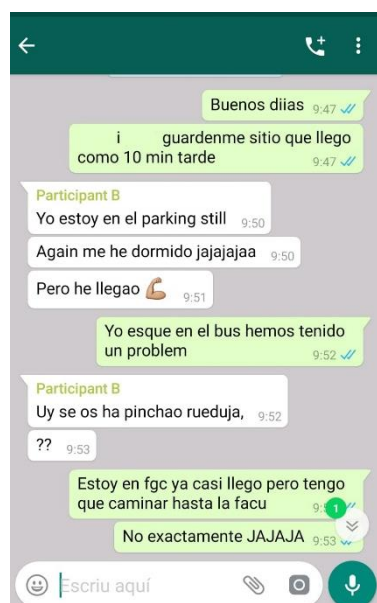


In an opposite situation, the following example shows Participant D code-switching when all the previous messages were typed in Spanish.

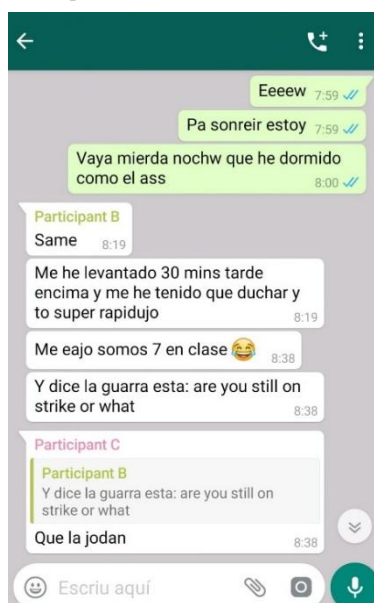


Elsewhere, we see Participant D follows the same procedures as Participant C by using English swearwords instead of Spanish ones and introducing English content words in Spanish sentences. In the following examples we can see these phenomena.

[Context: Participant C asks Participant B and another member of the group to save a spot for her in class because she is running late.]



[Context: Participant D shares she has not slept well, and Participant B agrees. He shares a comment by his teacher regarding the few people that are in class.]



[Context: Participant D shares a twitter interaction between Irish singer Niall Horan and a fan and gives her opinion about it.]



## 5 Analysis

Before carrying on with the analysis, it is worth mentioning that, although many English words have been incorporated into the vocabulary of young people in Spain, the extent to which this group of students uses English words and code-switches between Spanish and English is far more remarkable than an average young person in Spain. Spain is, by no means, comparable to a Latin American country as far as English inclusion in normal speech is concerned. The revision of the results on the previous section shows us that the presence of the other members of the group in the online speech act seems to trigger the participants to make use of CS more often and in more varied ways. We have seen, for example, that intra-word CS only occurs in online speech events where other members of the group are present. Likewise, it is clear that the number of English words



and expressions used increases greatly in direct conversations with members of the group. It is important, thus, to ask ourselves why these phenomena occur.

Instead of dividing this section by participants and media, it seems appropriate to structure it by just media. This way, we will go over what is common among the participants in each medium and, thus, provide clearer explanations of the abovementioned phenomena.

Firstly, focusing on conversations with people unconnected to the degree, we have seen that, in general, the inclusion of English words and expressions in casual conversations is lower with people that are not part of the group. When asked for the reason why, participants provided different explanations. Participant A mentioned the age of the people he held the conversations with. Age seems to be an important factor, as is proven by the fact that most messages containing English words and expressions by all participants were directed to young friends of them, so it seems appropriate to ask ourselves why. The common explanation is that older people in Spain do not have enough knowledge of the English language to understand. However, this explanation seems to be faulty for two main reasons. The first one is the fact that the number of older people that have at least a basic knowledge of English is increasing every year. Most importantly, is that the words that the participants used with their young friends, such as “thanks” or “please” are not words that require a very high level of English to be understood. In fact, they are the first words taught in primary education of the language. For this reason, we cannot say the reason why the participants do not use these expressions so commonly with older people is because they would not understand the language.

A more appropriate account would be to say that the use of English constitutes an identity statement that is shared in the conversations we have seen. Although the Internet is becoming a wide-spread phenomenon that has reached even the eldest members of

society, the origins of the Internet and social media lay on the youth population. We obviously must reject the outdated idea that young people constitute an outstanding majority when it comes to social media. As an illustration to this, a survey carried out in 2014 by the Pew Research Center concluded that 37% of Twitter users are between the ages of 18 and 29, while 25% of users are between the ages of 30 and 49 years old<sup>2</sup>. WhatsApp and Instagram show similar percentages when it comes to the age of their users, although maybe the latter is slightly more youth governed, with a 53% of users being between the ages of 18 and 29. The point to be made with this set of data is that people above the age of 30 are not excluded from social media and the internet anymore. However, as I said before the origins of the internet and the first social media websites such as Myspace were a youth-only phenomenon. It could be the case, thus, that the Internet and, more specifically, social media, is still socially seen as a very youth-exclusive environment in the sense that it establishes a closed group that is meant to set young people apart from the rest of the population. For this reason, and because the platforms have a growing percentage of users over the age of 30, maybe English is being used as a factor that creates inside-jokes and memes<sup>3</sup> that only young people are supposed to understand.

The debate concerning if English is the lingua franca of the Internet is still ongoing, but research such as the one conducted by Mares (2016) on English use on forums and social media platforms shows that young users have generally accepted English as a lingua franca and that they are very open to include English in different styles in their online speech. Furthermore, globalization has brought about online relationships with people all across the globe, in which English seems to be the main language that is

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<sup>2</sup> 12% of users are between the ages of 50 and 64, and 10% are 65 or more.

<sup>3</sup> Definition from the Cambridge Dictionary “an idea, image, video, etc. that is spread very quickly on the Internet”.

used. However, Mares states that older users do not tend to participate in these “new style games and therefore the gap between young and old generation is becoming more visible than ever before.” (Mares, 2016:15). Hence, the reason why the participants use a greater number of English words and expressions with younger friends must go beyond the common shallow explanation “older people would not understand (English)”. It seems to be a statement of membership to the young community that has little to do with older people understanding English or not, but rather to present oneself as a member of a distinct and more abstract community of “young people on the Internet”.

Secondly, shifting our attention to tweets, we have seen that all participants seem to use Twitter as a means of personal expression i.e. expressing disappointment with their days, explaining experiences they had, or posing rhetorical questions for self-reflection among other things. All participants on Twitter generally use only Spanish or English to express personal feelings or experiences. In order to explain this phenomenon, we must consider the concept of the “internal functions of language” by Mackey (2000), which was shortly introduced in the Methods section. Mackey states that in a continuum of bilingualism which would go from monolingualism to full bilingualism, one of the important aspects to consider is the internal functions the second language has. Some examples he offers to illustrate these internal functions are praying, counting, diary-writing, swearing or thinking in the second language. The reason why he considers these functions to be important is because they constitute the unconscious use of language, which seems to indicate the successful acquisition of the second language in the mind of a bilingual speaker.

In the case of the participants of this study, we find that the means of expression of their tweets could be compared with diary-writing in a way, for they include feelings, reflections and descriptions of situations that have happened to them. The obvious

distinction between diary-writing and tweeting, however, is that all participants are sharing these thoughts and experiences publicly. For this reason, we cannot imply that Twitter serves as a diary per se, but we could say the discourse type is similar. Thus, we can refer to Mackey's (2000) theory and state that the great number of tweets that contain personal expression in English could indicate the participants carry out the internal functions of this language. It is worth mentioning that the bilingual practices we detect on Twitter have to do with participants tending to use English when swearing, especially Participant C, which is also another of the internal functions of language posed by Mackey.

These could be reasons why the participants generally write monolingual tweets when in the previously explained context of personal expression. Nevertheless, we must keep in mind that the addressee of a message is an extremely important aspect to take into account in order to explain the choice of code by a speaker, and that choice can have many reasons behind it. In this case, we can understand these tweets from two different perspectives. The first one would support the theory of these tweets being similar to diary-writing and would indicate that the participants assume the tweets will be ignored or not seen by any of their followers. This would mean that the choice of English or Spanish could be explained by these being the languages the speakers consider comfortable to use when performing these internal functions of language, without any clear distinction when it comes to topics or themes. However, it seems highly unlikely that participants do not expect any of their followers to see their tweets, and therefore this first view seems to not be a complete enough explanation for the phenomenon. The second perspective would be to assume that the tweet is purposefully directed to their audience and that determines the choice of code. In this case, we could simply explain the lack of CS with the fact that the interaction is not directed to any member of the group and thus, the shared item of

distinction that is CS is not deemed necessary. Nonetheless, both views should be considered, as both contribute to explaining the monolingual phenomenon of Twitter.

Regarding Instagram posts, Participant B always writes his captions in English. His explanation for this is that his Instagram page is similar to a blog, in which he intends to have a visually appealing profile and inspire happiness and calm. He does not intend to share much of his life on Instagram and this is why his captions are more positive and upbeat. We could argue, then, that Participant B only uses English in this case not because it is his language of personal expression but because he might believe English will get him a wider reach and that, that way, everyone will be able to understand him. Having considered the particular case of Participant B, we see that generally all participants tend to use English only on Instagram and that the use of Spanish and Catalan is extraordinary in a way. Participant C, quite interestingly, only uses CS when the picture posted contains another member of the group while the rest of participants exclusively use monolingual communication as captions to their pictures.

A possible explanation for this phenomenon seems to tie with the arguments used up until this point, relating to the use of CS constituting a binding action or aspect of their group that sets them apart from other groups. They are inherently aware that the factor that joined them together in the first place is the enrollment in a degree that deals with the English language, so the use of English in their daily speech serves as a unifying phenomenon. In the case of Participant C, moreover, we see that she uses CS in her captions when the picture contains members of the group not only because the caption is sometimes addressed to them, but also as a statement of her membership to that particular group. That way, we see that this use of CS as a symbol of their group and as a way to set it apart from other groups is not only used privately but it is also claimed publicly.

Finally, let us deal with the code-switching in the WhatsApp group. As has been mentioned at the beginning of this section, the results clearly show that the amount of CS the participants perform increases remarkably when speaking on the WhatsApp group or simply speaking to (or about in the case of Participant C on Instagram) a member of the group. We could argue that, as they are all proficient in English, the use of CS helps participants express the exact meanings they want to express by using both languages at the same time. However, this theory seems to be flawed, because as much as there are words that do not have an appropriate translation to Spanish that conveys the same meaning (e.g. cringe), the majority of words and expressions used could have easily conveyed the same meaning if they were said in Spanish. It is not a way to boast their bilingual abilities either, as we have seen through the use of ungrammatical spellings of English that sound “Spanish” that the participants treat their shared knowledge and interest in the English language as a binding factor and not as a skill to display.

For this reason, we could theorize that the use of CS has to do more with a notion of identity. CS seems to develop enormously in the presence of other members of the group, who consequently feed each other on this characteristic. Thus, and as we have mentioned above, we could define this CS phenomenon as a way to identify themselves and the members of their group and, at the same time, to distance themselves from other groups. This constant interaction with CS and the amount of exposure to English the participants go through daily clearly leaves a trace that might cause them to use English words or expressions with other people, especially with younger people, and that can be taken up as a way to state they are a young person on the internet, but we have seen that the inclusion of English words is never to the same extent as they do among the members of the group. This leads us to believe that the use of CS to this particular group constitutes a unifying phenomenon that defines them as different from other groups. Therefore, this

would be the reason why the number of instances of CS increases when the members of the group are involved in the online speech act in some way.

## **6 Conclusion**

As we have seen, CS in CMC is a very extensive topic, dealing with the many ways in which meaning can be constructed through the many possibilities social media offers. The analyzed pieces of discourse above illustrate the different contexts in which these four participants make use of the languages they know and with which objectives. On Twitter and Instagram, the communication is generally monolingual when the participants are directing themselves to a broader audience. The particular cases in which CS was used in these social media were directly linked to the involvement of one of the members of the group in the speech events described. We have seen that English is very commonly used as a means of personal expression, in websites such as Twitter in which the majority of users shares their feelings in their timeline. In other contexts, such as Instagram for Participant B, English is chosen as the primary resource for expression, which indicates that to the writer's perception, English is the language of the Internet. The use of Spanish and Catalan seem to be reduced to personal expression in the case of Participants B and C, and references to Spanish pop culture in the case of the three participants.

Although the initial thought for the use of CS might be that it is merely more useful to use two languages to express the exact meaning you want to convey instead of being restricted to just one, it was proven wrong through the use of expressions and words that do not differ in meaning at all from their Spanish counterparts. The use of CS for these participants seemed to increase enormously when in presence of the other members, while only a trace of using certain words or expressions in English could be seen when the participants talked to other people online. For this reason, the main argument was that

the participants used CS as a means to convey their identities as members of a particular bilingual group. We have seen that sometimes this statement of identity is done among the group, so privately, but in the case of Participant C on Instagram it is also done publicly. Thus, their intention is characterizing their group and stating that they possess a unifying practice that sets their group apart from other groups. In conclusion, CS in this group chat could be seen as a binding factor that serves as a means to construct a communality and identity as members of the same group.

## 7 References

- Amazouz, Djegdjiga, Adda-Decker, Martine, and Lamel, Lori (2017). Addressing Code-Switching in French/Algerian Arabic Speech. *Interspeech 2017*: 62-66.
- Androutsopoulos, Jannis. (2011). Language change and digital media: a review of conceptions and evidence. Retrieved January 15, 2019, from Jannis Androutsopoulos, Research on Language on Media and Society. Website: <https://jannisandroutsopoulos.files.wordpress.com/2011/11/language-change-and-digital-media-preprint.pdf>
- Auer, Peter. (1998). *Code-Switching in Conversation: Language, Interaction and Identity*. London: Routledge.
- Barton, David and Lee, Carmen. (2011). *Language Online: Investing Digital Texts and Practices*. New York: Routledge.
- Barton, David, Page, Ruth, W. Unger, Johann, and Zappavigna, Michele. (2014). *Researching Language and Social Media: A Student Guide*. London: Routledge.
- Belazi, Heidi, Rubin, Edward, and Toribio, Almeida Jacqueline. (1994). Codeswitching and X-bar theory: The Functional Head Constraint. *Linguistic Inquiry*, 25 (2): pp. 221-237.
- Blom, John, Gumperz, John (1972). Social Meaning in Linguistic Structures: Code-switching in Northern Norway. In J. Gumperz and D. Hymes (Eds.). *Directions in Sociolinguistics* (pp.125-137). New York: Holt, Rinehart, Winston.
- Dorleijn, Margreet, Mous, Maarten, and Nortier, Jacomine. (2009). Urban youth speech styles in Kenya and The Netherlands. In J. Nortier and B. A. Svendsen (Eds.), *Language, Youth and Identity in the 21<sup>st</sup> Century* (pp. 271-289). Cambridge: Cambridge University Press.
- Ferguson, Charles. (1959). Diglossia. *Word Journal*, 15 (2): pp. 325-340.
- García, Ofelia, Otheguy, Ricardo, and Reid, Wallis. (2015). Clarifying translanguaging and deconstructing named languages: A perspective from linguistics. *Applied Linguistics Review*, 6 (3): pp. 281-307.



- Georgakopoulou, Alexandra. (1997). Self-presentation and interactional alignments in e-mail discourse: The style and code switches of Greek messages. *International Journal of Applied Linguistics*, 7 (2): pp. 141-164.
- Gumperz, John. (1982). *Discourse Strategies*. Cambridge: Cambridge University Press.
- Haugen, Einar. (1950). The Analysis of Linguistic Borrowing. *Language*, 26: pp. 210-331.
- Herring, Susan. (2007). A Faceted Classification Scheme for Computer-Mediated Discourse. *Language@Internet*, 4. Retrieved from: <http://www.languageatinternet.org/articles/2007/761/>
- Hinrichs, Lars. (2006). *Codeswitching on the Web*. Amsterdam/Philadelphia: John Benjamins.
- Hutchby, Ian. (2006). *Media Talk: Conversation Analysis and the Study of Broadcasting*. Glasgow: Open University Press.
- Hymes, Dell. (1974). *Foundation in Sociolinguistics: An Ethnographic Approach*. Pennsylvania: University of Pennsylvania Press.
- Kim, Suin, Oh, Alice, Weber, Ingmar, and Wei, Li. (2014). Sociolinguistic Analysis of Twitter in Multilingual Societies. *Proceedings of the 25th ACM conference on Hypertext and social media*: pp. 243-248.
- Lave, Jean, & Wenger, Etienne. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Lee, Carmen. (2007). Linguistic features of email and ICQ instant messaging in Hong Kong. In B. Danet and S. Herring (Eds.). *The Multilingual Internet* (pp. 184–208.). Oxford: Oxford University Press.
- Lee, Carmen. (2017). *Multilingualism Online*. New York: Routledge.
- Mackey, Wayne. (2000). The Description of Bilingualism. In L. Weir (Ed.), *The bilingualism reader* (pp. 22-50). New York: Routledge.
- Mahootian, Shahrzad. (2005). Linguistic Change and Social Meaning: Codeswitching on the Media. *International Journal of Bilingualism*, 9 (3-4): pp. 361-375.
- Milroy, Lesley, and Muysken Pieter. (1995). *One speaker, two languages: Crossdisciplinary perspectives on code-switching*. Cambridge and New York: Cambridge University Press.
- Moyer, Melissa. (1992). *Analysis of Code-Switching in Gibraltar*. (Doctoral Dissertation). Universitat Autònoma de Barcelona. Retrieved from <https://www.tdx.cat/bitstream/handle/10803/4918/TMGM2de3.pdf?sequence=2&isAllowed=y>
- Muysken, Pieter. (2000). *Bilingual Speech*. Cambridge: Cambridge University Press.
- Myers-Scotton, Carol. (1993). *Social Motivations for Code-Switching. Evidence from Africa*. Oxford: Clarendon.
- Paolillo, John. (1996). Language Choice on soc.culture.punjab. *Electronic Journal of Communication*, 6 (3).

- Pérez-Sabater, C. (2015). Discovering language variation in WhatsApp text interactions. *Revista Semestral de Lingüística, Filología y Traducción*, 31 (1): 113-126.
- Poplack Shana, and Sankoff, David. (1993). Variation theory and language contact. In D. Preston (Ed.), *In American Dialect Research: An Anthology Celebrating the 100th Anniversary of the American Dialect Society* (pp. 251-286). Amsterdam: Benjamins.
- Romaine, Suzanne. (1989). *Bilingualism*. Oxford: Blackwell Publishing.
- Tsiplakou, Stavroula. (2009). Code-switching and code-mixing between related varieties: Establishing the blueprint. *International Journal of the Humanities*, 6 (12): pp. 49-66.
- Weinreich, Uriel. (1953). *Languages in Contact: Findings and Problems*. New York: Linguistic Circle of New York.

## **APPENDICES**

### **APPENDIX A - Consent Form**

This was the consent form signed by all four participants:

You are being invited to participate in a research study entitled ‘Bilingual Practices of English Philology Students on Social Media’.

This research seeks to shed light on the ways Spanish and Catalan students of English Philology perform code-switching and other bilingual practices on social media. Your participation will involve allowing the researcher to use the information/data that will be collected from WhatsApp, Instagram and Twitter to be included in her research. Random samples of data from Twitter and Instagram in a time span of 3 years will be used and will be analyzed to identify bilingual practices depending on context, topic and recipient. Random WhatsApp messages directed to the researcher will be gathered and analyzed to identify code-switching.

Your participation, of course, is voluntary but would be greatly appreciated. You may choose not to participate or to withdraw your consent at any time without penalty. If you agree to the use of your information/data for this research project, please simply sign on the line below; if you don’t agree, none of your data will be included in the research. If you decide to withdraw from the study, the information that can be identified as yours will be removed-

The results of the research study may be published, but your name will remain anonymous and any identifying information will not be used. In fact, the published data will be presented as a Corpus in the Annex of the study. Your identifying information will only be known by the researcher and her tutor. There are no known risks associated with this project. The findings from this project may help participants have a better

understanding of the bilingual practices they carry out, which will promote a greater awareness of their communication strategies.

The researcher conducting this study is: Carlota González Rider. I will respond to any questions you have. You are welcome to contact me at the cell phone number 644 509 088, [Carlota.GonzalezR@e-campus.uab.cat](mailto:Carlota.GonzalezR@e-campus.uab.cat) .

### Research Subject's Consent to Participate in Research:

I have read the above information and have received answers to all my questions. I consent to take part in the study.

Name of Researcher \_\_\_\_\_ Signature

Date

Name of Participant \_\_\_\_\_ Signature

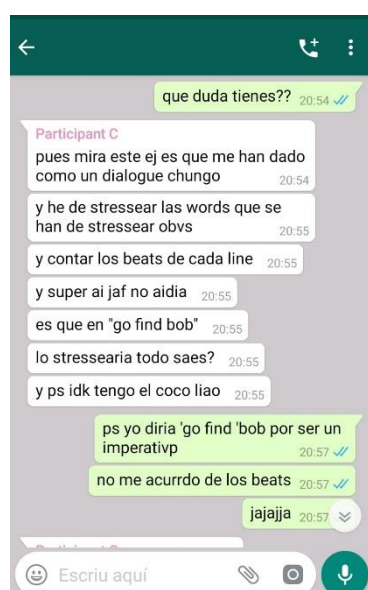
Date

Please sign both copies, keep one and return one to the researcher.

### APENDIX B - WhatsApp Group Conversations

These are the conversations from the abovementioned WhatsApp group, plus private conversations between Participant A and Participant D. The messages go from April 2017 to April 2019. All names have been substituted by fake ones. All green messages belong to the researcher, Participant D:

[Context: Participant A asks the group for help on a phonetics assignment she has to do.]



[Context: Participant A, B and D go to this class together, but only Participant B was there at the moment it started. He reports on what the teacher is saying at the moment]



[Context: Participant C changes the previous topic to introduce a story about a fight she caused in her work's WhatsApp group.]



[Context: Participant B, C and A comment on a classmate who is complaining about the marks of an exam on the official group of the degree.]



[Context: Participant B asks the group if they think a subject's homework has to be sent to the teacher or not.]



[Context: Participant D shares a twitter interaction between Irish singer Niall Horan and a fan and gives her opinion about it.]



The screenshot shows a WhatsApp chat interface. At the top, there is a green header bar with a back arrow on the left, a voice call icon and a plus sign in the center, and a three-dot menu icon on the right. The chat background is light gray. The conversation consists of several messages:

- A white bubble from Participant C: "Tú saliste con glasses no?" (21:43)
- A white bubble from Participant D: "Y al final todos nos hemos cogido la del birrete no?" (21:44)
- A green bubble from Participant D: "noo yo sin" (22:01) with two blue checkmarks.
- A white bubble from Participant C: "Saliste sin glasses???? Fantasia" (22:05)
- A green bubble from Participant D: "sii" (22:05) with two blue checkmarks.
- A green bubble from Participant D: "cpmo pienso operarme af" (22:05) with two blue checkmarks.
- A white bubble from Participant C: "Me rajo" (22:05)
- A green bubble from Participant D: "asi cuando mire atras dire" (22:05) with two blue checkmarks.
- A white bubble from Participant C: "Jajajajajajaja" (22:05)
- A green bubble from Participant D: "estoy igual" (22:06) with two blue checkmarks.

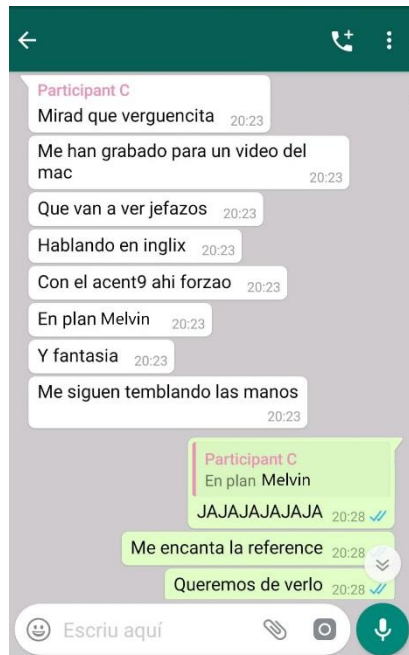
At the bottom of the screen, there is a white input area with a smiley face icon on the left, the placeholder text "Escriu aqui", a paper plane icon, a camera icon, and a green circular microphone icon on the right.

[Context: A conversation between Participant B and C in which they talk about how they are going to spend New Year's Eve in London.]

[Context: A conversation between Participant B and C in which they are talking about the Christmas hampers they are being given at their jobs.]

[Context: Participant A,B,C and D discuss an exchange student that Participant B likes.]

[Context: A conversation where Participant C mentions a classmate they collectively do not like and who forces a British accent when he speaks.]



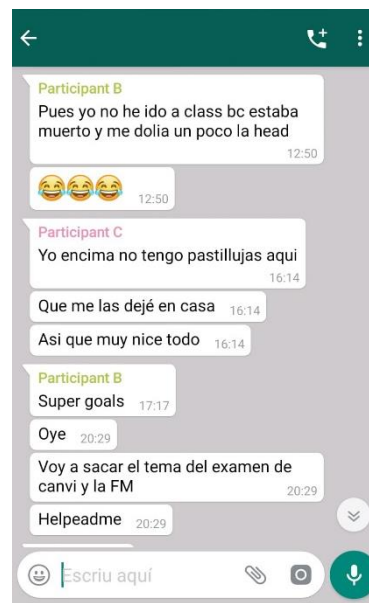
[Context: Participant D shares a dream she had in which Participant B and C appeared.]



[Context: Participant A and D talk about some flights they have to buy to go to a music festival.]

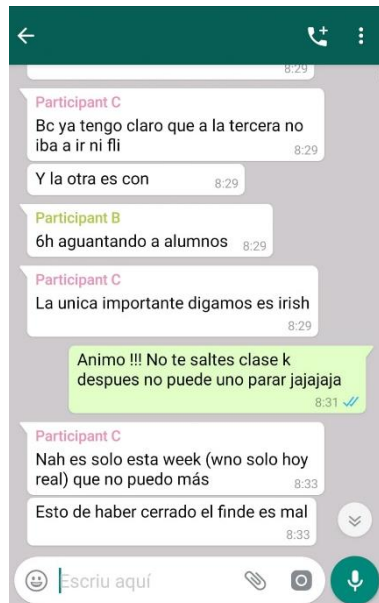


[Context: Participant B and A are both feeling ill and they share how they feel. Participant B changes the topic. He tells the group he will send a message to the official group of the degree asking for a change of an exam that coincides with a faculty party and asks the group for support.]





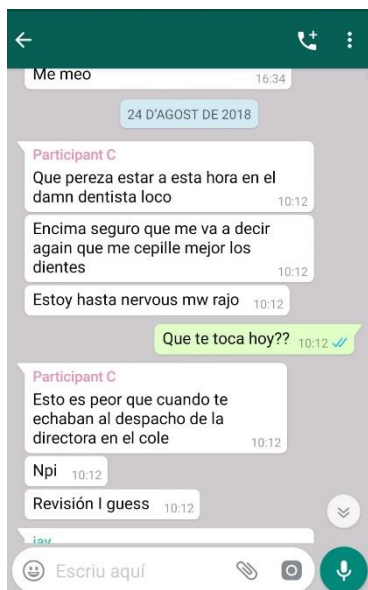
[Context: Participant C explains the reasons why she has not attended class, and she adds that she had to stay at work until late during the weekend.]



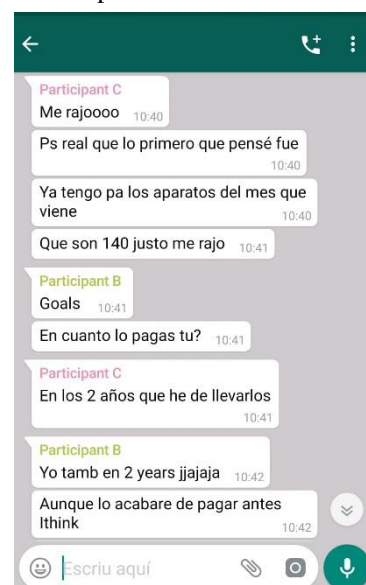
[Context: Participant D uses a nickname to refer to a classmate they do not particularly like and explains an answer he gave to a teacher that she found funny.]



[Context: Participant A shares her feelings about going to the dentist, where she regularly goes.]



[Context: Participant B asks Participant A what she will do with the money she won by playing Bingo, and she says she'll use it to pay for her braces. Participant B wears braces as well.]

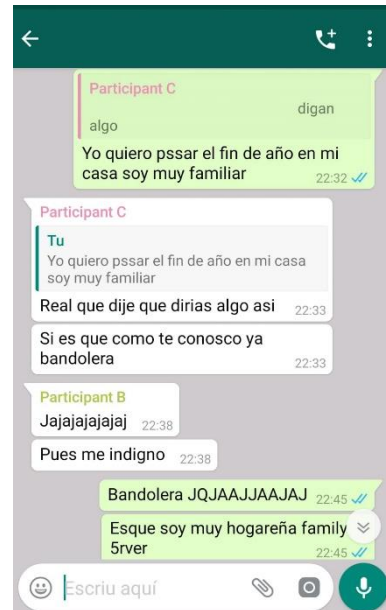




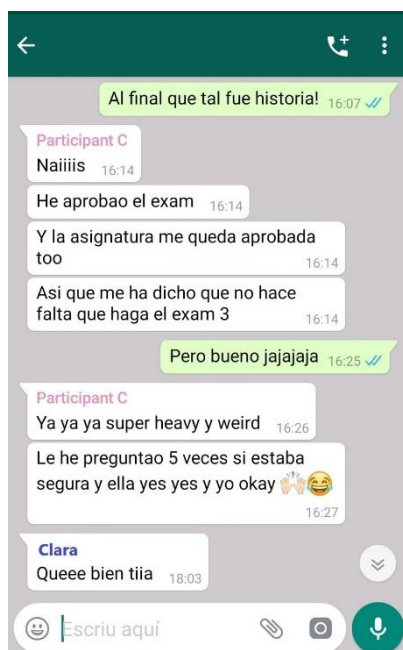
[Context: Participant A has just enrolled for some subjects and she complains she has not been able to choose the teachers she wanted.]



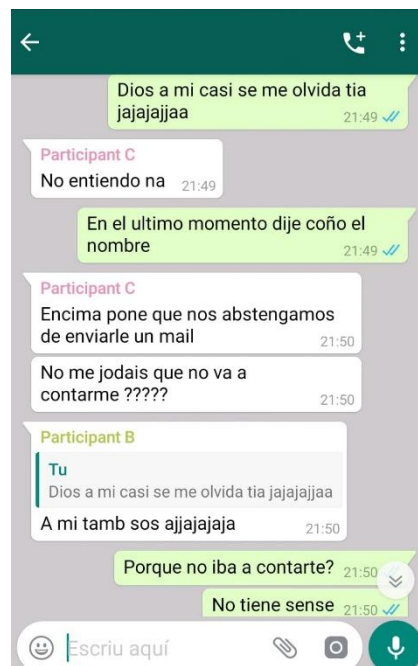
[Context: Participant C asks Participant A and D if they would like to spend New Year's Eve in London with them, as they are organizing a trip.]



[Context: Participant A says the teacher has told her that she got a pass mark for a subject she is repeating, so she is allowed to skip the final exam.]



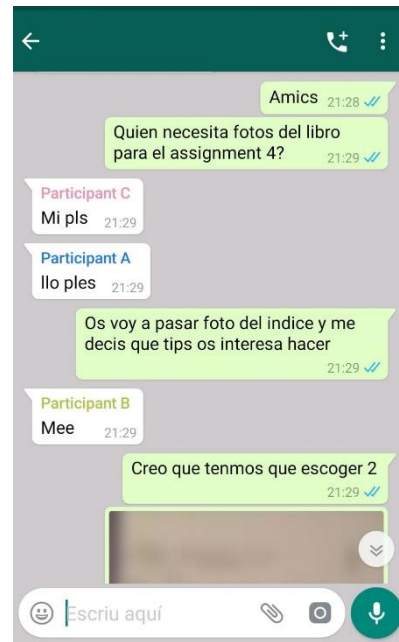
[Context: Participant B, C and D discuss an exam they have taken, in which Participant C has forgotten to put in the name. The grades have been posted and her grade is not there, so she is worried.]



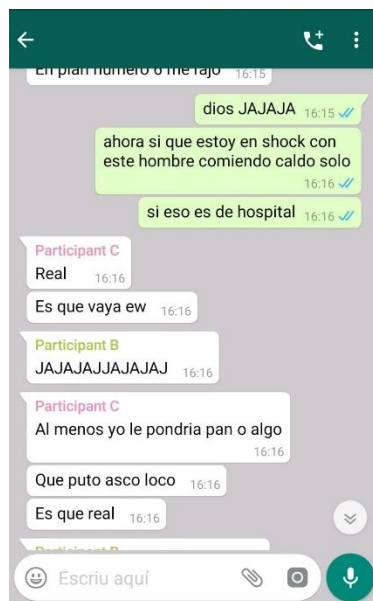
[Context: Participant C asks what the exam of her group of a subject will deal with, but Participant D's group has already dealt with poems in the previous exam.]



[Context: Participant D is the only one that has a book that is needed for an assignment, so she asks the group if they want pictures in order to do it.]



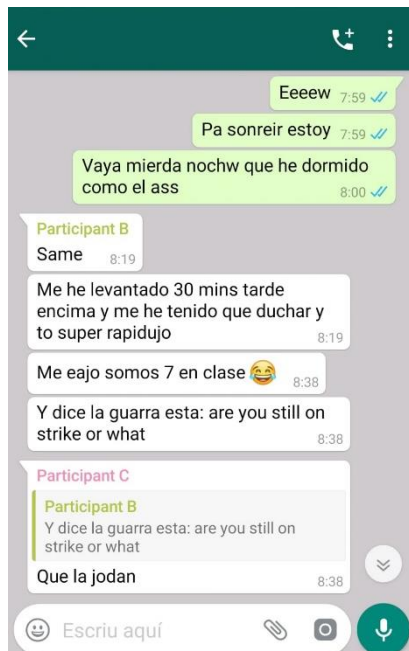
[Context: Participant C and D laugh about Participant D liking soup without any pasta in it.]



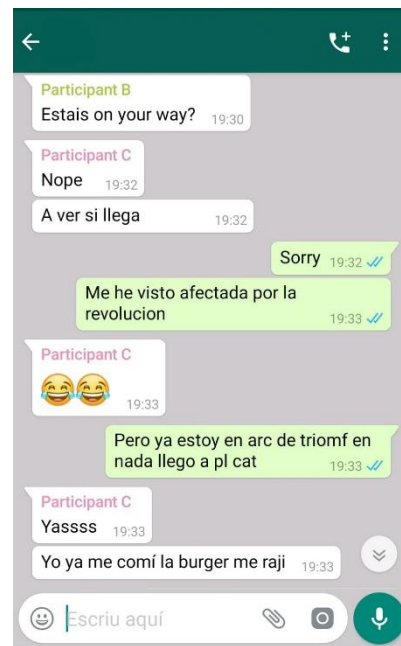
[Context: Participant B says Participant B's advice on food was good.]



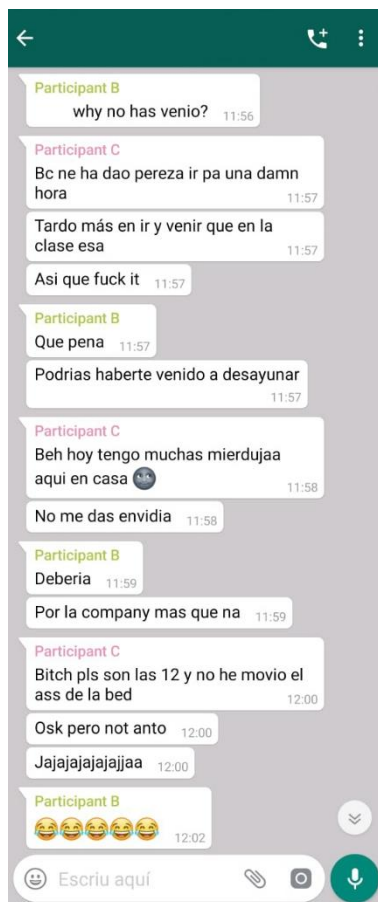
[Context: Participant D shares she has not slept well, and Participant B agrees. He shares a comment by his teacher regarding the few people that are in class.]



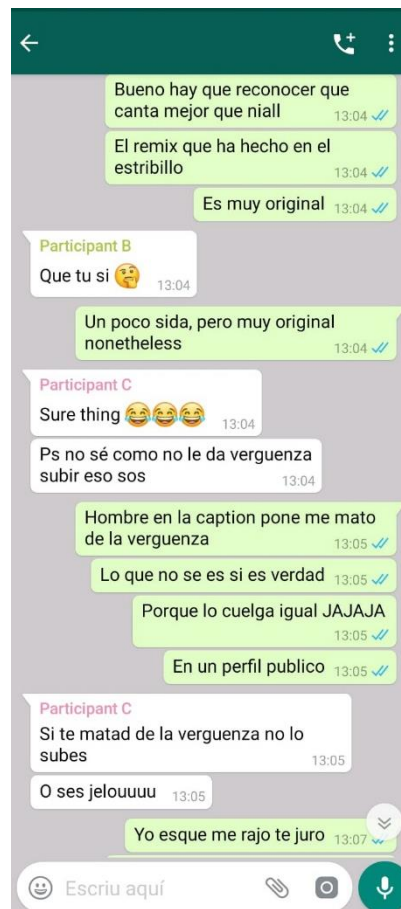
[Context: Participant B, C ask about Participant D because they have agreed to meet up.]



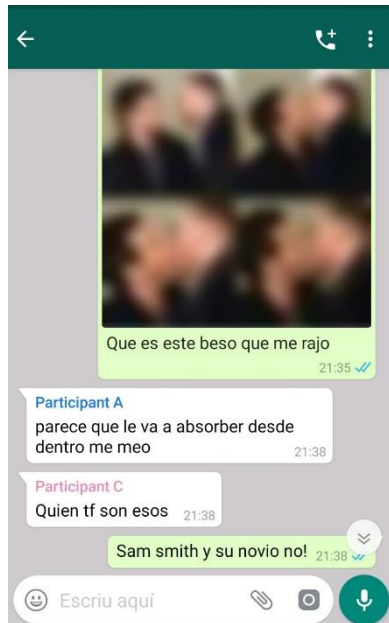
[Context: Participant B asks Participant A why she has not come to class.]



[Context: Participants B, C and D gossip about a singing video one of their classmates has posted.]



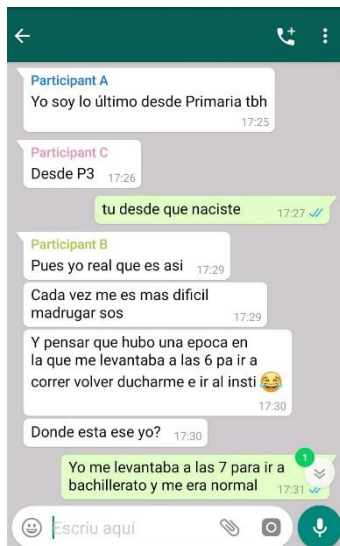
[Context: Participant D shares a picture she has seen on Twitter.]



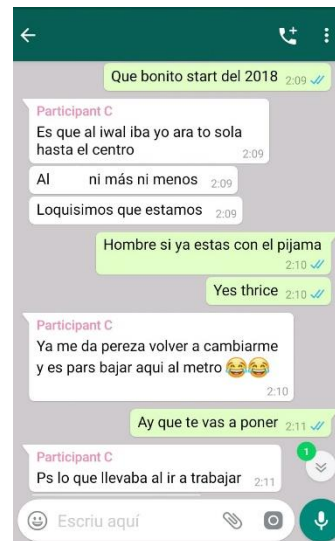
[Context: Participant A, B and D discuss whether to go to a karaoke for Participant B's birthday or not.]



[Context: Participant D shares a tweet saying that we wake up very early all throughout high school without a problem and at university it is much more difficult to wake up early.]



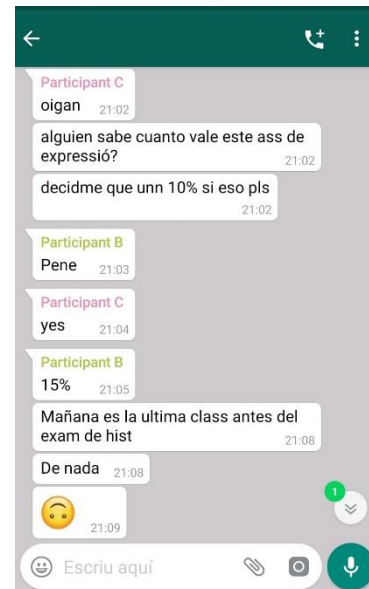
[Context: Participant C and D are talking about how a boy is going to go to Participant C's house. The censored name belongs to a problematic neighborhood in Participant C's city.]



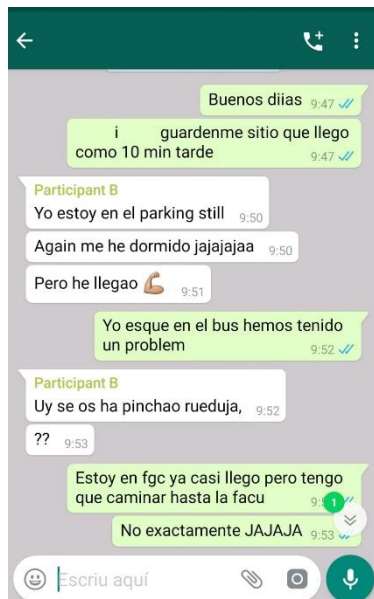
[Context: Participant B shares a screenshot showing that he sent a friend of his a video of Participant D, made by another member of the group.]



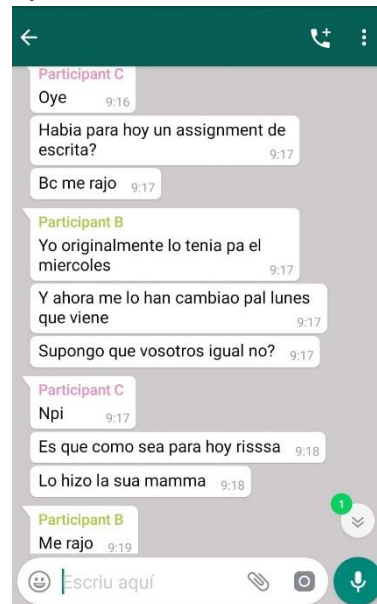
[Context: Participant C asks the group if someone knows what the percentage of the assignment they are doing is.]



[Context: Participant C asks Participant B and another member of the group to save a spot for her in class because she is running late.]



[Context: Participant C asks the group if they have to hand in an assignment today, but Participant B is in a different group and tells her what they did there.]

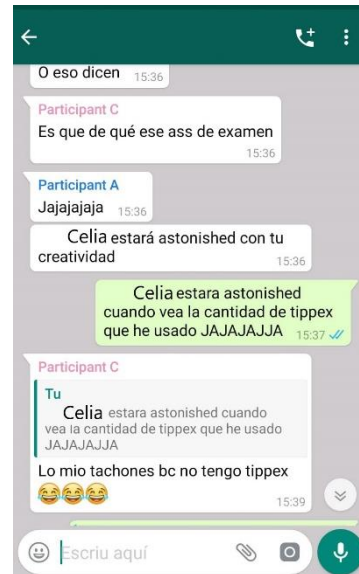




[Context: Participant B says he has finished the two books for the literature exam they are all taking soon.]



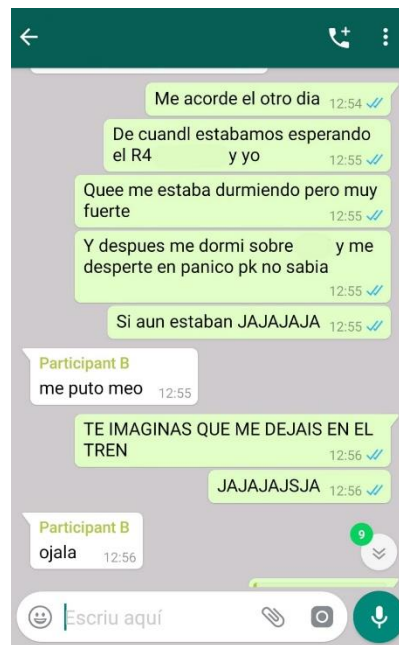
[Context: Participant A, B and D discuss an exam they have just taken, with which they are not very satisfied.]



[Context: Participant A asks the group if they can explain what the X-bar theory is, and Participant C and D express their fear of failing.]



[Context: Participant D recalls one time, coming home from going out with Participant B and C, when she fell asleep on Participant B on the train ride.]



A screenshot of a WhatsApp chat conversation. The chat header is green with a back arrow on the left, a voice call icon, and a three-dot menu on the right. The chat background is light gray. The conversation includes several messages: a green bubble from 'Participant B' saying 'Participant A'; a blue bubble from 'Participant A' asking 'Y si elijo el suicidio mejor??' with a timestamp of 22:07; a white bubble saying 'Voto a favor' with a timestamp of 22:07; a blue bubble from 'Participant A' saying 'stfu' with a timestamp of 22:07; a white bubble saying 'Lo de las optativas sabéis cómo va?' with a timestamp of 22:07; a white bubble saying 'Porque como pone en curso 3º/4º no sé si ahora mismo tengo que mirármelas o qué' with a timestamp of 22:08; a white bubble saying 'Es que si no obligatorias solo cuento 8...' with a timestamp of 22:13; a green bubble from 'Participant B' saying 'Idioma creo que tienes que coger uno si o si' with a timestamp of 22:14; and a white bubble saying 'Pero lo ponen en optativas porque puedes escoger cual' with a timestamp of 22:14. At the bottom, there is a white input field with the text 'Escriu aquí', a paperclip icon, a camera icon, and a green circular button with a white microphone icon. A green bubble with the number '9' and a white double-checkmark icon is partially visible on the right side of the screen.

Bueno os cuento amiwiis. Como ya sabreis , y yo fuimos no hace tanto a los cines Icaria a ver Dunkirk y a nuestro querido Harry en VO. La cuestion es que al comprar las entradas nos dieron una oferta de 4 entradas por 4'50 cada una que dura hasta el 8 de noviembre. Queremos ir a ver el Rey Arturo y, en conclusion, necesitamos dos personas mas para que nos acepten la oferta. (En fines de semana solo es valida para las sesiones hasta las 17:00) 8:11 ✓

**Participant B**  
Yo segun cuando vayamos yes 9:28

Que no la he visto y ya dije que si 9:28

**Participant A**  
A mí no me interesa mucho sorry :( 9:32

**Participant B**  
A ti no te interesa na que no invollee comidaja joputo 9:33

**Participant A**  
Kinda 9:33

Pues que venga alguien random para llenar el huequito 9:39 ✓

**Participant B**  
Y que quiera ver una peli en vo 9:40

Eso JAJAJA 9:42 ✓

venga invitamos al topo 9:42 ✓

Que la fonetica es su pasion 9:43 ✓

Escríbeme aquí

**Participant A**

Había que leer algo de Tomás ?  
21:16

**Participant B**

Maybe  
21:25

**Participant A**

Gracias      qué haría sin ti ❤️  
21:26

**Participant C**

Me rajo bc iba a contestar igual sos  
21:26

**Participant A**

Bueno pues que le fucken al damn mago del hormiguero  
21:27

**Participant B**

JAJAJAJAAJAJAJAJAJA  
21:27

Tio yo hoy ya he estado aplicado infaf  
21:28

 Escriu aquí   

←

Ahora a parte de jugar a futbol 16:30 ✓

Han decidido fumar maria que llega hasta aqui el olor y poner un altavoz con un reggeaton moro raro 16:31 ✓

Yo me rajo 16:31 ✓

Ya viene 16:32 ✓

Puntualisimo 16:32 ✓

Participant B

Ironia o no? 16:34

Si si 16:35 ✓

Osea no es ironka 16:35 ✓

Que ha pasado a i 3 justo 16:35 ✓

Participant B

Yo estoy ya en la estacion 16:35

Voy hacia ti 16:35 ✓

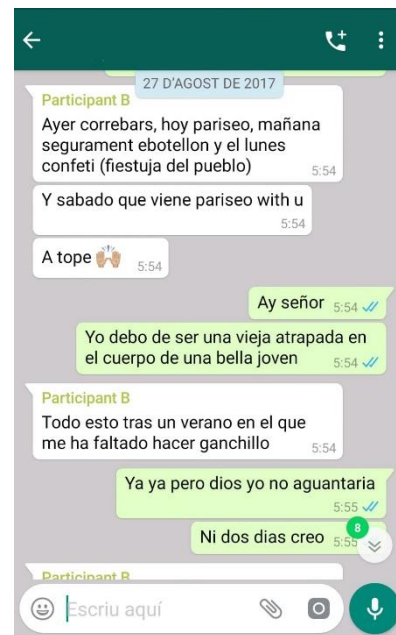
😊 Escriu aquí

👉 📷 🎤

[Context: Participant C and D have just returned from a trip to Manchester.]



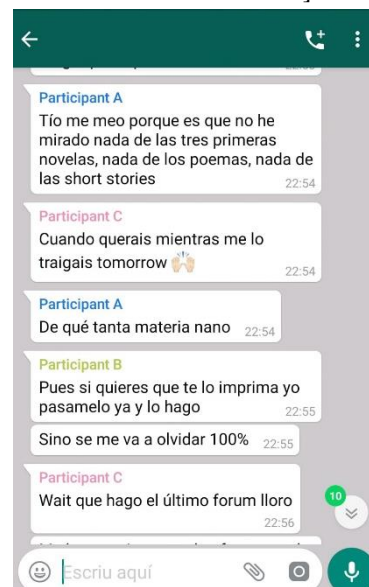
[Context: Participant B shares her summer plans with the group.]



[Context: Participant D asks if anyone in the group is taking a subject she is going to take next semester.]



[Context: Participant A complains about the great number of topics in an upcoming literature exam while Participant C asks Participant B if he can print some documents for her.]

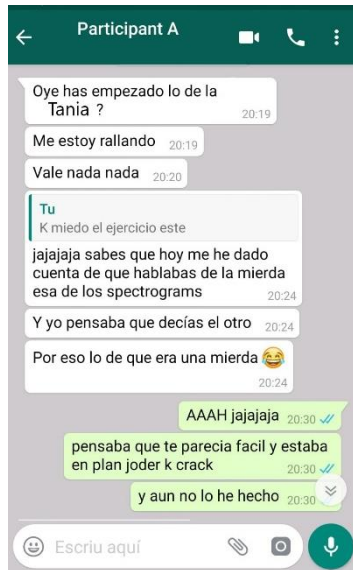


## Private conversations between Participant A and Participant D

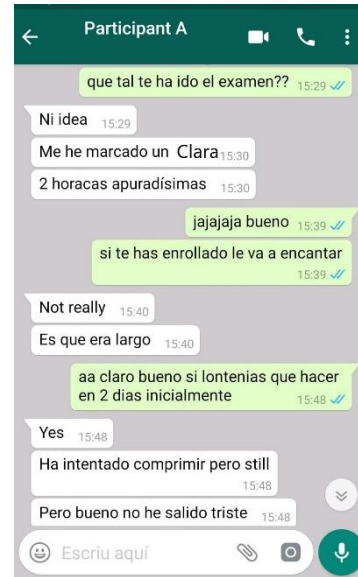
As we did not have much data from Participant A through messages on the group chat, we will look at some private conversations between him and Participant D as well, as they serve the same purpose.



[Context: Participant A asks Participant D if she has started an assignment they both have to hand in shortly and then refers to a previous message about homework from another subject.]



[Context: Participant A refers to a common friend who is also part of the group and who always takes a long time to finish exams.]



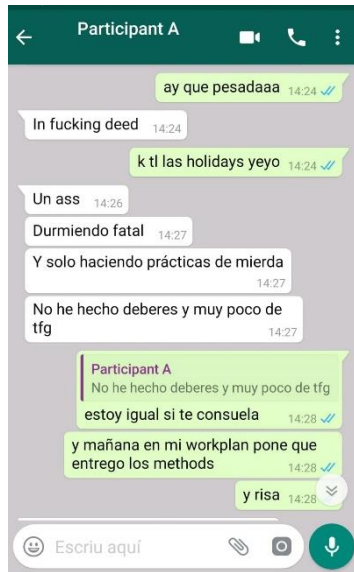
[Context: Participant D asks Participant A for help on an online quiz they both have to do.]



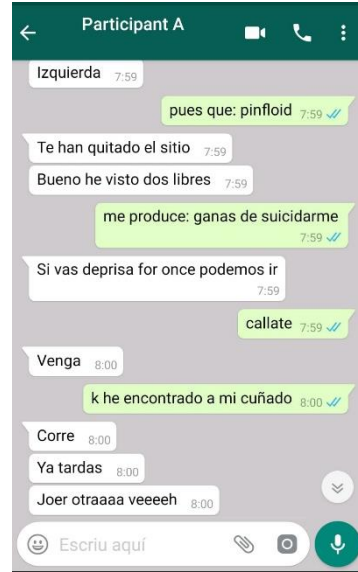
[Context: Participant D advises Participant A to make the line drawings for a phonetics assignment with word and he says it worked well.]



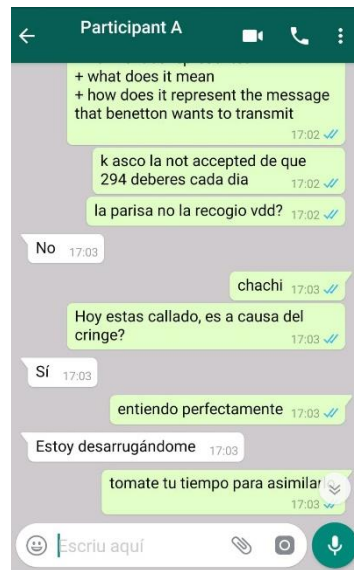
[Context: Participant D asks Participant D about his Easter holidays.]



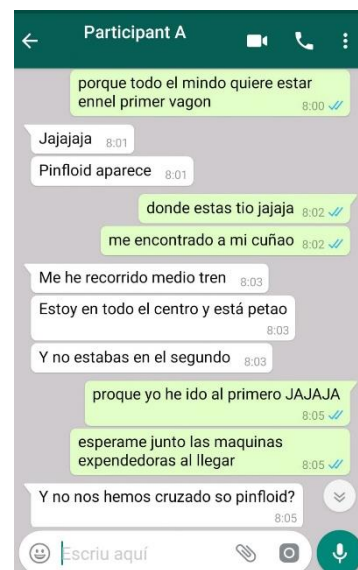
[Context: Participant A and D are texting while trying to find each other on the train.]


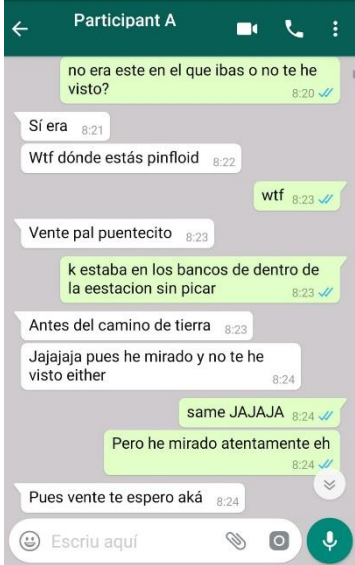
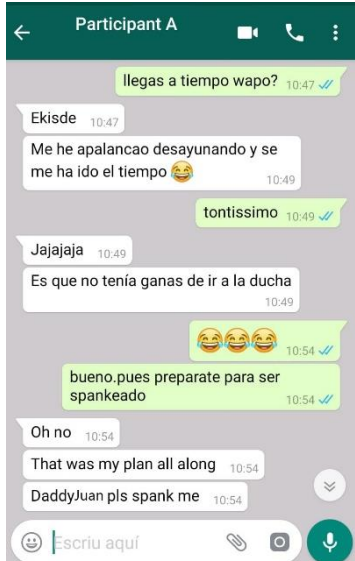
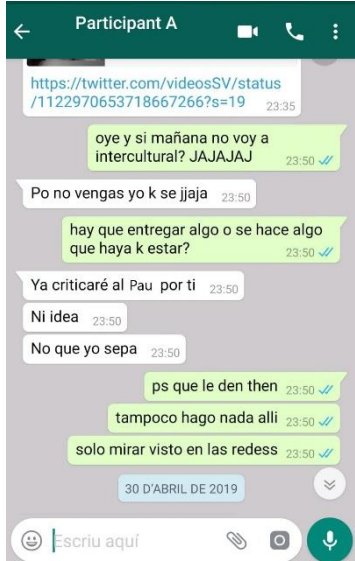


[Context: Participant D jokes with Participant A.]



[Context: Participant A and D are texting while trying to find each other on the train.]



<p>[Context: Participant D asks Participant D about a grade of an assignment he was worried about.]</p> 	<p>[Context: Participant A and D trying to find each other at the train station where D was waiting for A.]</p> 
<p>[Context: Participant D asks Participant A if he is coming to class in time and then they joke about the teaching spanking him for being late.]</p> 	<p>[Context: Participant A refers to a classmate they both dislike.]</p> 

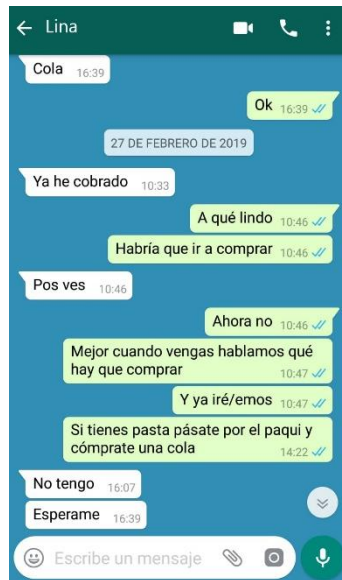
## APPENDIX C - Participant A

As I already mentioned, Participant A does not have Twitter or Instagram, so we can only report on WhatsApp conversations with people unconnected to the degree.

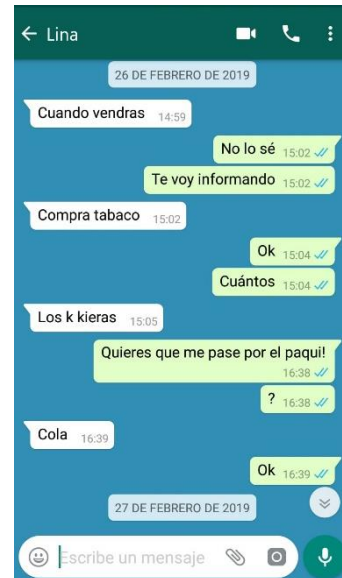
### WhatsApp conversations

These are conversations Participant A had with people unconnected to the degree, accompanied by context provided by the participant. All names have been substituted by fake ones. Green messages belong to Participant A:

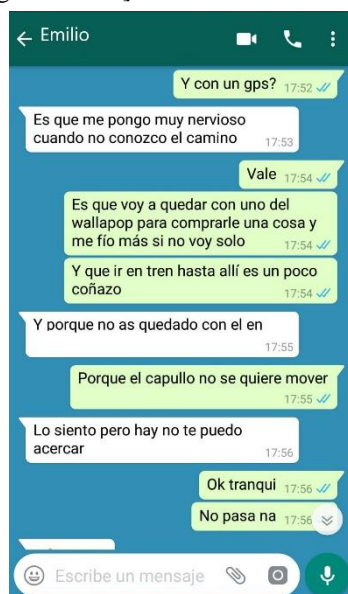
[Context: A conversation between Participant A and his mother.]



[Context: A conversation between Participant A and his mother, in which she asks when he will come home because he is at university doing a group project.]



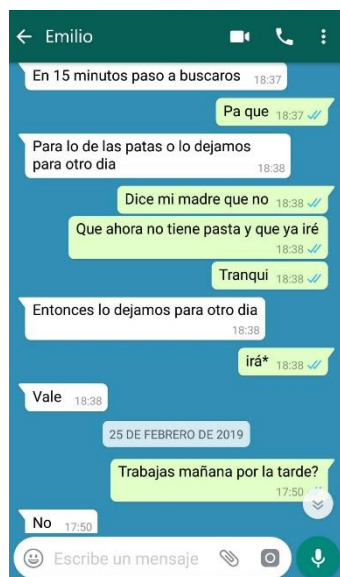
[Context: A conversation between Participant A and his cousin in which he asks him if he can give him a ride to meet up with a person who wants to buy something from him.]



[Context: Three conversations between Participant A and his mother.]



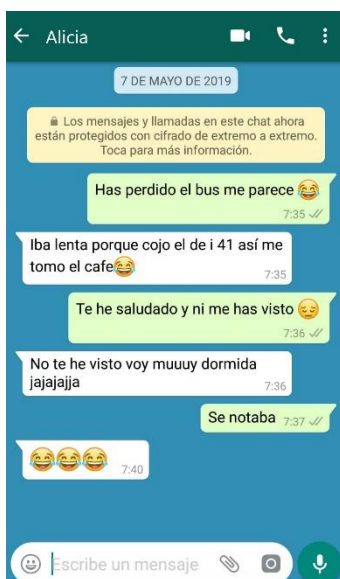
[Context: A conversation between Participant A and his cousin in which he offers to take them buy legs for a table by car.]



[Context: A conversation between Participant A and his cousin, who is a teacher.]



[Context: A conversation between Participant A and his cousin after seeing her in the morning.]



[Context: A conversation between Participant A and her mother about a known neighbor they both dislike.]



## APPENDIX D - Participant B

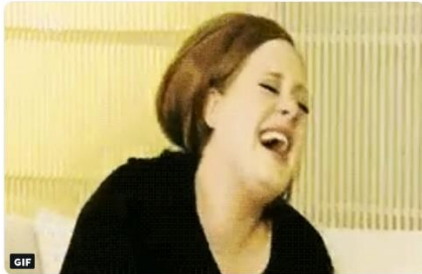
### Tweets

All the tweets by Participant B that were analyzed, in chronological order from April 2017 to April 2019:



Me: I want to go to so many different places in the world!

Bank account:



1:51 - 28 d'abr. de 2017

It's been too hot today... It is still quite hot actually! Can anyone book me a flight to Alaska or Iceland or somewhere colder?

23:20 - 25 de maig de 2017

I think I've packed evrything I have ever owned

20:53 - 27 de juny de 2017

Can you actually believe I'm studying (more or less) even though I'm on holidays? 😂

23:27 - 26 de jul. de 2017

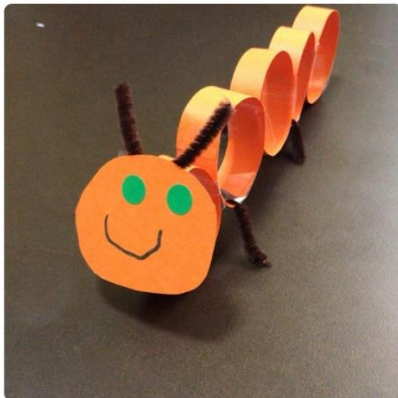
Finally got the Weekday belt that had sold out 🙏

19:55 - 27 d'ag. de 2017

I have new goals in life and I'm working hard to achieve them 💪 I can't do certain things yet but I will be able to in the future 🙏

0:14 - 27 de set. de 2017

This caterpillar that one of my students (he's 4 btw) has just made looks happier than me 😂





18:28 - 20 d'oct. de 2017

Esto va para esa gente que se cree experta comentando OT pero que en verdad no saben de na. Ni siquiera saben respetar a la gente y decir su opinion sin insultar o reirse de alguien.



0:56 - 28 de nov. de 2017

<p>Let's make some pancakes for breakfast 🥞😍</p> <p>10:17 - 25 de des. de 2017</p>	<p>I'm working till 10pm today... someone come and kill me already 🙈</p> <p>14:57 - 22 de gen. de 2018</p>
<p>Surprisingly enough, my engagement on Instagram has improved in the last couple of weeks 🤔</p> <p>22:56 - 21 de febr. de 2018</p>	<p><b>Participant C</b> · 29 de març de 2018 Hello world. I'm seeing Harry tomorrow. Bye.</p> <p>En resposta a @</p> <p>Me explicas que acabo de tuitear sobre esto? 😂 sos</p> <p>15:56 - 29 de març de 2018</p>
<p>I'm having a problem with a product I recently bought and I have to return it. Does this email sound professional to you? Lol "if we forget" WHAAT?!</p> <div><p>Hello</p><p>When we receive it from you, we would refund to you</p><p>If we forget, please tell us by email to remind me</p><p>Thanks</p></div> <p>10:04 - 28 d'abr. de 2018</p>	<p>Soy el unico que piensa que estos dos tienen talento? 📈📈</p> <div><p>HISTORIA DE ESPAÑA. #FactorX7</p></div> <p>20:33 - 27 de maig de 2018</p>
<p>It's been a year since one of the most wonderful experiences of my life! If you know me, you'll know how much @adele and her music means to me</p>  <p>23:33 - 29 de juny de 2018</p>	<p><b>DUA LIPA</b> · @DUALIPA · 25 de jul. de 2018 Dear @ddlovato you are a force to be reckoned with and stronger than you think. We're all here for you ❤️</p> <p>En resposta a @DUALIPA</p> <p>Yo es que de verdad que me caso contigo 🥰</p> <p>22:11 - 25 de jul. de 2018</p>

<p>Mi madre: afeitate y ponte apaño</p> <p>Yo: gracias por ser superficial y no valorar la belleza natural que me acompaña cada mañana cuando me despierto</p> <p>13:11 - 31 d'ag. de 2018</p>	<p>Real que me identifico mazo con Damion... yo creo que este chico en unas galas nos va a sorprender mas de lo que lo hace <a href="#">#OTGala1</a></p> <p>22:56 - 26 de set. de 2018</p>
<p>Are you comfortable talking to your barber?? Because I feel like I've got the most random and awkward conversations with him 😂</p> <p>11:19 - 25 d'oct. de 2018</p>	<p>I love having people that make me feel better with a little chat 🥰</p> <p>1:28 - 13 de nov. de 2018</p>
<p>Merry Christmas 🎄❤️</p> <p>11:15 - 25 de des. de 2018</p>	<p>Tengo fiebre 🤒 que fantasia de dia</p> <p>7:37 - 8 de gen. de 2019</p>
<p>Vaya dia llevamos 🙄</p> <p>14:41 - 28 de febr. de 2019</p>	<p>Por que mierdas no tengo sueño? Si estaba cansadisimo hace unas horas 🤔</p> <p>2:18 - 28 de març de 2019</p>
<p>I wanna go back to bed 😞 Me muero super</p> <p>8:54 - 25 d'abr. de 2019</p>	

## Instagram posts

All the Instagram captions by Participant B that were analyzed, in chronological order from April 2017 to April 2019, accompanied by photo descriptions to provide context. All usernames have been censored and all names substituted by fake ones:



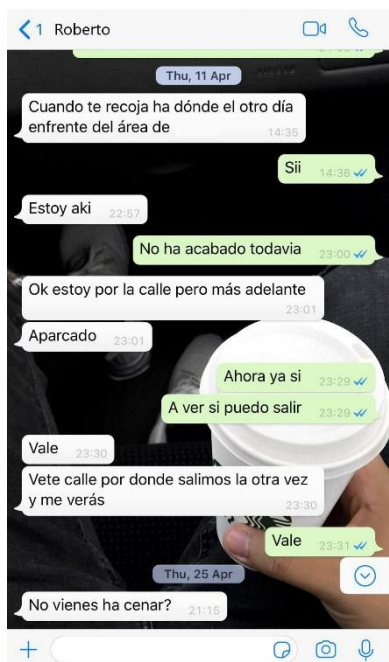
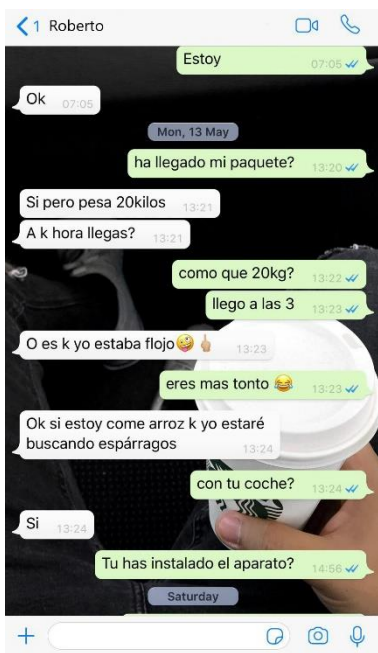
<p>[Photo description: A picture of a dome in Barcelona.]</p> <p>Architecture 🏠</p> <p>110w</p>	<p>[Photo description: A picture of Participant B in front of a building.]</p> <p>Just one more 🧑</p> <p>105w</p>
<p>[Photo description: A picture of his hand holding a box of cupcakes in front of the store.]</p> <p>I'm a cupcake lover and I watch all of @cupcakejemma's videos so I just had to go to her shop in Soho and grab some cupcakes! They were delicious!</p> <p>99w</p>	<p>[Photo description: A picture of Brighton.]</p> <p>Missing it already! Especially the weather... it's too hot in Barcelona 🔥</p> <p>97w</p>
<p>[Photo description: A picture of a polaroid picture of Participant B with two friends.]</p> <p>Memories 📷</p> <p>91w</p>	<p>[Photo description: A mirror selfie of Participant B.]</p> <p>Today's #ootd 🧑</p> <p>86w</p>
<p>[Photo description: A picture of Participant B sitting on a step with an orange jacket.]</p> <p>I'm obsessed with this jacket! It counts as halloweeny, doesn't it? 🎃</p> <p>84w</p>	<p>[Photo description: A picture of his lap with a Macbook on it.]</p> <p>A full review about this Macbook sleeve just went live on .com! Make sure you check it out and let me know what you think.</p> <p>78w</p>
<p>[Photo description: A picture of Participant B posing.]</p> <p>#tb to this shot 🙌 I'm still in love with these sneakers btw</p> <p>74w</p>	<p>[Photo description: A picture of Participant B sitting on the ground.]</p> <p>Happy Friday 🙌</p> <p>70w</p>
<p>[Photo description: A picture of Participant B in front of the sea.]</p> <p>Rainy day in Barcelona 🌧️ also my new post about some shows from @080bcnfashion just went live on .com</p> <p>67w</p>	<p>[Photo description: A picture of Participant B posing.]</p> <p>Weekend vibes 🙌 How's your weekend going so far?</p> <p>63w</p>
<p>[Photo description: A picture of Participant B sitting on the sidewalk.]</p> <p>Ultraboosts and side stripes are definitely my go-to kind of vibe 🙌</p> <p>57w</p>	<p>[Photo description: A picture of Participant B sitting on a sofa.]</p> <p>When you match your new sofa</p> <p>51w</p>

<p>[Photo description: A picture of Participant B by a statue.]</p> <p>Had so much fun on the first day of #080bcnfashion 🙌 It was boiling hot though! So I went for a chilled vibe. What have you been up to today?</p> <p>47w</p>	<p>[Photo description: A picture of Participant B with a pink shirt.]</p> <p>Gotta love some pink from time to time 🙌</p> <p>42w</p>
<p>[Photo description: A picture of Participant B sitting on a staircase.]</p> <p>When all is said and done, you'll believe God is a woman 🔥 anyone else is obsessed with Ariana at the moment? Bc same 🙌</p> <p>38w</p>	<p>[Photo description: A picture of Participant B in Barcelona.]</p> <p>One of my favourite buildings in Barcelona 🙌 How are you guys doing? Uni and my job give me no time for blogging unfortunately... However, now that I'm settled I'll be working hard on it again! You'll see a few blog posts soon on .com 😊</p> <p>(📷 @ )</p> <p>34w</p>
<p>[Photo description: A picture of Participant B posing.]</p> <p>I'm back bitches 😊 It's taken a while but I can finally say that there's a new blog post on .com! I'm working on uploading more regularly on Instagram too, but I still need to have more photos taken!</p> <p>30w</p>	<p>[Photo description: A picture of Participant B posing.]</p> <p>As you may have noticed already, I love this T-shirt 😊 Even though I'm busy af, I've realised I need to spend time doing more of what makes me happy. It is very important for my mental health and tbh for everyone's too. How's life going for you?</p> <p>(📷 @ )</p> <p>27w</p>
<p>[Photo description: A picture of Participant B in front of a building. The censored username belongs to a friend of his.]</p> <p>My obsession for architecture is still growing 🙌 What are the most interesting buildings in your city?</p> <p>(📷 @ )</p> <p>24w</p>	<p>[Photo description: A picture of Participant B posing. The censored username belongs to Participant C.]</p> <p>My first post of the year 😊 It's been a crazy start for me! I started the year in London, where I had the best time with some of my friends. Then, I came back home and I had to start studying for my finals... and I've been very ill this week 😊 but I'm still very happy and motivated haha how's your 2019 been so far??</p> <p>(📷 @ )</p> <p>19w</p>

<p>[Photo description: A picture of Participant B in Casa Batlló.]</p> <p>Wandering around one of the coolest buildings in Barcelona 📷</p> <p>(📷 @ )</p> <p>16w</p>	<p>[Photo description: A picture of Participant B posing. The censored username belongs to a friend of his.]</p> <p>Oh dear... it's been a while! 🙄</p> <p>Basically, I've been busy with a million of other things (and still am) apart from being in a non-creative mood. However, I'm feeling much more motivated now which is good! How's everything going for you tho?</p> <p>(📷 @ )</p> <p>9w</p>
<p>[Photo description: A picture of Participant B posing.]</p> <p>After a mini break, I am ready to keep improving myself and working hard on my goals. Negativity has been part of my life for a little while, but I'm filling up my mind with some fresh air and positive vibes. How's everything going for you?</p> <p>4w</p>	

## WhatsApp conversations

These are conversations Participant B had with people unconnected to the degree, accompanied by context provided by the participant. All names have been substituted by fake ones. Green messages belong to Participant B:

<p>[Context: A conversation between Participant B and his father, in which he is picking him up and they are agreeing on where to meet.]</p> 	<p>[Context: A conversation between Participant B and his father.]</p> 
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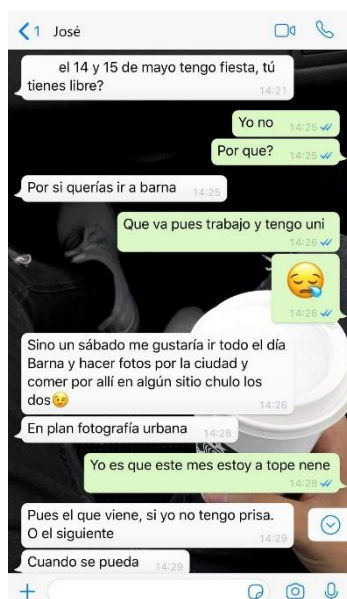
[Context: A conversation between Participant B and his mother.]



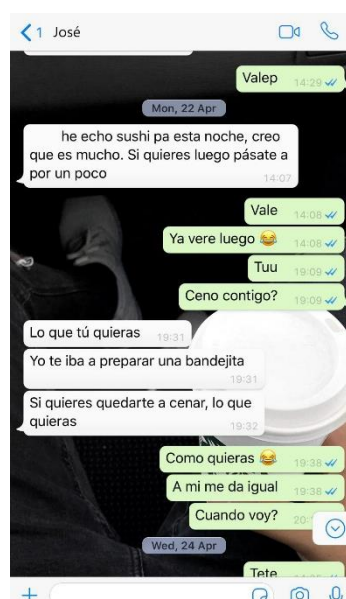
[Context: A conversation between Participant B and a coworker in which they discuss what to do for an activity they have to craft as teachers.]



[Context: A conversation between Participant B and his brother.]



[Context: A conversation between Participant B and his brother in which he invites him for dinner at his house.]



[Context: A conversation between Participant B and a friend of a friend in which he asks her for advice on what to buy her friend for her birthday.]



[Context: A conversation between Participant B and a friend.]



[Context: A conversation between Participant B and a coworker in which he asks her for a website of reader exams they were told about in a work meeting before.]



[Context: A conversation between Participant B and a friend, discussing if they can go buy a gift for a common friend whose birthday is coming up.]




## APPENDIX E - Participant C

### Tweets

All the tweets by Participant C that were analyzed, in chronological order from April 2017 to April 2019:



<p>Oficialmente desde ayer a la tarde soy una sísi woohoooo</p> <p>8:34 - 19 d'abr. de 2017</p>	<p>De qué el aire del metro a 20 grados bajo cero ya de buena mañana? Que alguien me lo explique porque ahora quiero volver con mis sábanas af</p> <p>8:22 - 23 de maig de 2017</p>
<p>Me da una pereza tremenda tener que mover el ass de la cama</p> <p>11:56 - 27 de juny de 2017</p>	<p>Este año he de pagar 2000 pavos para la matrícula de la uni 🙄</p> <p>11:20 - 14 de jul. de 2017</p>
<p>De qué mi hermano viendo Inuyasha en castellano. Menudo sacrilegio.</p> <p>17:42 - 23 d'ag. de 2017</p>	<p>Espero que el tour mundial de Niall pase por Barcelona y que se pueda comprar M&amp;G y tal como en Australia etc sino mato a alguien</p> <p>16:35 - 8 de set. de 2017</p>
<p>Before going to sleep I just wanted to say that I fucking love #Flicker from the beginning till the very end. Now, good night everybody.</p> <p>0:51 - 20 d'oct. de 2017</p>	<p>El vicio al animal crossing es tan real como la vida misma o sea que me lo descargué ayer por la tarde y soy nivel 17 ya me rajo</p> <p>16:16 - 22 de nov. de 2017</p>
<p>La verdad es que me tenéis lo que viene siendo un poquito hasta el coño con operación triunfo</p> <p>17:16 - 26 de des. de 2017</p>	<p>Spain loves Trump</p>  <p>15:45 - 8 de gen. de 2018 des de Barcelona, Espanya</p>

<p>De qué cada vez que salgo tarde de trabajar tiene que ir el damn nitbus lleno joder</p> <p>2:03 - 19 de febr. de 2018</p>	<p>I still cannot believe all of yesterday's events 😭❤️</p> <p>9:19 - 16 de març de 2018 des de <a href="#">Manchester, England</a></p>
<p>El ccme cae en el mismo día que tengo una boda.. y pues como vaya Louis me corto las venas porque a ver qué hago con mi vida ????? Si es que soy gafe para todo en esta vida joder</p> <p>13:11 - 21 d'abr. de 2018 des de <a href="#">Barcelona, Espanya</a></p>	<p>Salgo de casa en menos de dos horas y todavía no tengo ni la maleta hecha. Define vagancia en su máximo estado 😂😂</p> <p>6:12 - 3 de maig de 2018 des de <a href="#">Barcelona, Espanya</a></p>
<p>Me he duchado ya dos veces en lo que va de día y ya estoy empezando a sudar otra vez. Oficialmente el verano 2018 ha empezado chicxs.</p> <p>16:15 - 10 de juny de 2018 des de <a href="#">Barcelona, Espanya</a></p>	<p>Obviously <a href="#">#MTVHOTTEST</a> Niall Horan Ma babe is a model after all</p> <p>23:06 - 21 de jul. de 2018 des de <a href="#">Palma, Espanya</a></p>
<p>La gente a la que no se le escapa el bus en la cara siempre qué clase de pacto ha hecho con Satán ??????</p> <p>11:09 - 26 d'ag. de 2018 des de <a href="#">Barcelona, Espanya</a></p>	<p>Deseando ver las reacciones de la gente al ver entrar a Miriam AJAJAJAJAJA FANTASIAAAAA AY AY AYYYY LA MONICA POLLOS COMO SE NOS VA A PONER <a href="#">#GHVIPGala3</a></p> <p>23:24 - 27 de set. de 2018 des de <a href="#">Barcelona, Espanya</a></p>

<p>La gente que no ha llevado nunca aparatos no sabe lo que es sufrir después de comer chorizo/fuet</p> <p>23:40 - 21 d'oct. de 2018 des de Barcelona, Espanya</p>	<p>fucking dying already here in Irish Lit class yayyyyyy thanks Nialler</p> <p>Niall Horan @NiallOfficial Very exciting watching my ideas come to life in the studio so far ❤️</p> <p>10:18 - 21 de nov. de 2018</p>
<p>Soy la única a la que le da pereza máxima este año la damn navidad???? Porque de verdad que ojalá ya mayo pls</p> <p>15:38 - 24 de des. de 2018 des de Barcelona, Espanya</p>	<p>De verdad que este hombre (Kiko) no tiene nada más que vender ahora que su ex-problema con las drogas???? Pregunto. Qué pesadilla! #GHDÚOLímite2</p> <p>22:46 - 22 de gen. de 2019 des de Barcelona, Espanya</p>
<p>I didn't know I hated poetry until I had to take a whole subject dedicated to it. Fucking hell if this shit isn't boring af</p> <p>12:39 - 22 de febr. de 2019</p>	<p>this is me every time I'm in front of an exam</p> <p>Niall Horan @NiallOfficial En resposta a @ Don't know what that's about</p> <p>10:24 - 6 de març de 2019</p>
<p>I wanna go to see Louis at CCME so so SO BAD this next September!!!! Why does it have to be in Madrid? 🤔🤔🤔 can they move it to Barcelona pretty please? Or even better, can just you move your ass to Barcelona @Louis_Tomlinson ??? I'd really appreciate it</p> <p>22:42 - 27 d'abr. de 2019 des de Barcelona, Espanya</p>	

## Instagram posts

All the Instagram captions by Participant C that were analyzed, in chronological order from April 2017 to April 2019, accompanied by photo descriptions to provide context. All usernames have been censored and all names substituted by fake ones:



<p>[Photo description: A picture of Participant C's cat inside a box.]</p> <p>A cat in a box #oreo</p> <p>110w</p>	<p>[Photo description: A picture of Participant C. Caption referring to the members of the group going out. The two censored usernames refer to a person who was part of the group at the time and Participant A, respectively.]</p> <p>Por más noches como esta soon pls! #vendedoresdecervezalocos #yguirispeculiares #chirichirichiri PD: También os quiero a vosotros @ @ pero me niego a subir la foto de todos donde salgo con cara de culo 🙈</p> <p>100w</p>
<p>[Photo description: A picture of Participant C laughing on the beach.]</p> <p>Apparently being in the beach was super fun 😎</p> <p>100w</p>	<p>[Photo description: A picture of Participant C with a person who was part of the group at the time, laying on the beach and looking at the sea.]</p> <p>Cuando estás mirando no sé qué cosa en el mar pero la foto queda decente anyway ✨</p> <p>94w</p>
<p>[Photo description: A picture of Participant C sitting on a bench in Dublin.]</p> <p>Beautiful and sunny, but still cold, Ireland 🍀💙 #Dublin #nofilterneeded</p> <p>90w</p>	<p>[Photo description: A picture of Participant C with another member of the group and Participant D.]</p> <p>#tb to last night with these two babes🔥💣</p> <p>56w</p>
<p>[Photo description: A picture of Participant C with British singer Liam Payne.]</p> <p>Everybody that has been in my life (no matter if lots or not of time or for whatever reason) knows how much 1D and all their boys mean to me, so you can imagine how over the moon I'm still feeling because of this. I really don't know what to say but damn it, thanks Liam for that smile of yours. I love you with my whole heart @liampayne. Always 💙</p> <p>54w</p>	<p>[Photo description: A picture of Participant C with Irish singer Niall Horan.]</p> <p>Cause if the whole world was watching I'd still dance with you... 💙 I really cannot express with words the love I have for you @niallhoran, like srsly, it's something impossible to do. Again, thank you, thank you and thank you. Love you, always. #flickerworldtour2018 #Barcelona #NiallHoran</p> <p>54w</p>

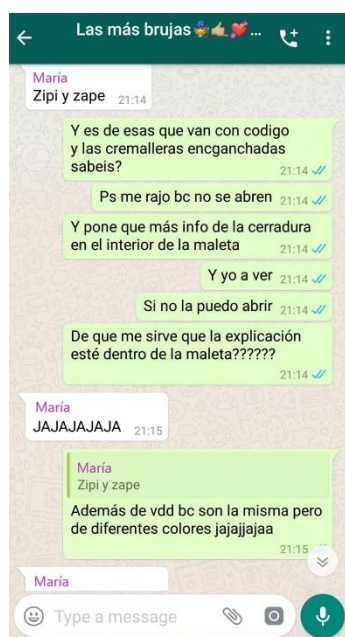
<p>[Photo description: A picture of Participant C in Lisbon.]</p> <p>When you like more a random photo than the one you were about to actually pose for 😊 muito obrigada Portugal, see you soon ❤️</p> <p>53w</p>	<p>[Photo description: A picture of Participant C with another member of the group.]</p> <p>Japi belated berzdei Elena!  🙏 Sorry por la tardanza de este año pero ya sabes donde estoy metida y que no sé ni en que día vivo me rajo (anyway ya te felicité por priv 🙏) y en vdd sobra que te diga lo típico de love ya, por muchos años más, y blablabla bc we know that it will happen af. Sólo te digo que espero que en verano te den vacaciones cuando a mí para poder hacer otro de esos grandiosos trips de los nuestros 💕  PD: espero que disfrutes de una de las últimas fotos hechas por tu adored palo selfie 😊</p> <p>60w</p>
<p>[Photo description: A picture of Participant C in front of the sea.]</p> <p>Empieza la época donde subir fotos postus (en mi perfil obvs) con/en el mar es un hecho #mallorca</p> <p>44w</p>	<p>[Photo description: A picture of Participant C floating in the sea.]</p> <p>Really missing those beautiful places 😊 and yep, that little thing drifting there it's me #mallorca</p> <p>40w</p>
<p>[Photo description: A picture of a park in Barcelona.]</p> <p>I love you #Barcelona ❤️</p> <p>92w</p>	<p>[Photo description: A picture of Participant C looking at the sea.]</p> <p>Cloudy sunsets 🌅</p> <p>38w</p>
<p>[Photo description: A picture of Participant C with Irish singer Niall Horan.]</p> <p>It was about time I posted this pic... Happiest of birthdays to this amazingly awesome babe @niallhoran 😊 Hope I can hug you again soon enough! Love ya lots ❤️ #lisboa #flickerworldtour</p> <p>36w</p>	<p>[Photo description: A picture of Participant C kissing her cat.]</p> <p>No te puedo querer másssss  ❤️❤️❤️</p> <p>35w</p>
<p>[Photo description: A picture of Participant C with another member of the group. The censored usernames belong to abovementioned member and Participant B, respectively.]</p> <p>No filter needed ???? Love ya textpai @</p> <p>Best photographer ever (😊) @  Y a ver pa cuando otra fiestecita de éstas. Pero esta vez con buena música y esas cosas pls y thx.</p> <p>34w</p>	<p>[Photo description: An older picture of Participant C with another member of the group and Participant B.]</p> <p>No caption needed 🤔🤔🤔  Love you both a s f u c k</p> <p>PD: en la última salimos kiuts as a button 🤔</p> <p>33w</p>

<p>[Photo description: A picture of Participant C smiling as she holds a cup of coffee. The censored username belongs to Participant B.]</p> <p>Me encanta poder subir fotos sonriendo y no decir "iugh qué asco" 🤔</p> <p>También es verdad que un chocolate caliente (con un poco de vainilla) ayuda a una a sonreír más fácilmente 📷: @</p> <p>📱: @starbucks_es (btw, gracias por vuestros super tapones en los botes)</p> <p>29w</p>	<p>[Photo description: A selfie of Participant C.]</p> <p>(Ignorando mis pelos de loca del conio) me encanta el frío y el poder llevar sudaderas al fin yassss* 💙</p> <p>29w</p>
<p>[Photo description: A picture of Participant C with another member of the group and Participant B.]</p> <p>Y esto es a lo que creo que se refería la gente cuando decían que la universidad es la mejor época. Nuevas y verdaderas amistades. Porque no los puede haber más frikis, borrachos y gordos. Osk af ❤️</p> <p>29w</p>	<p>[Photo description: A picture of Participant C in front of the London Eye.]</p> <p>Simplicity makes me happy 😊</p> <p>20w</p>
<p>[Content description: A video of Participant C celebrating the New Year.]</p> <p>Happy new year 2019 🎉</p> <p>20w</p>	<p>[Photo description: A picture of Participant C smiling.]</p> <p>Share your smile with the world 😊</p> <p>16w</p>
<p>[Photo description: A selfie of Participant C with Participant D. The censored username belongs to Participant D.]</p> <p>Exactly one year ago today, was one of the best days of my life. Here you can see us before and after meeting Niall, us during the concert and also us losing our shit when he appeared on the stage. Cannot wait to relive all of this again and again on the next tour @niallhoran Love ya crying bitchy screamy baby @ ❤️</p> <p>PS: yes, I cried af while watching all the memories 😭😭</p> <p>10w</p>	

## WhatsApp conversations

These are conversations Participant C had with people unconnected to the degree, accompanied by context provided by the participant. All names have been substituted by fake ones. Green messages belong to Participant C:

[Context: This is a WhatsApp group with two coworkers of hers and the topic being discussed is two suitcases Participant C and her brother had recently bought.]



[Context: A conversation between Participant C and a girl who was her coworker at the time. The topic is meeting up for a work dinner they are both going to attend to.]



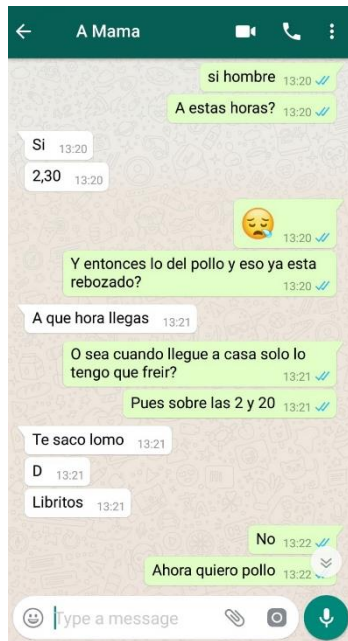
[Context: A conversation between Participant C and a coworker on the day they are meeting up for lunch.]



[Context: A conversation between Participant C and her mother. Her mother is out shopping and Participant C asks her for things from the store.]



[Context: A conversation with her mother in which she tells her she is going to the hairdresser and then they discuss what Participant C will have for lunch, since her mother will not be there to cook it.]



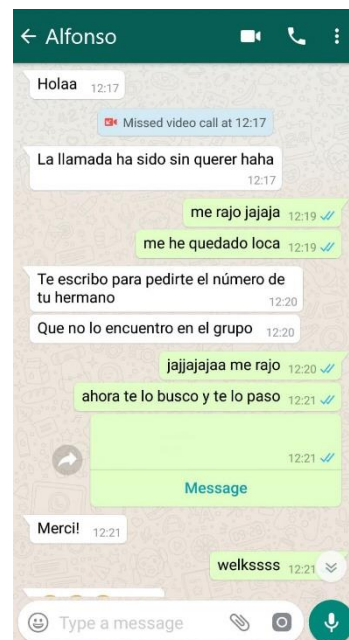
[Context: A conversation between Participant C and a coworker in which the latter sends a voice message saying that an unknown number had called her asking for Participant C and her brother.]





[Context: This is a WhatsApp group with some friends that went to the Niall Horan concert with her, in which they are discussing whether to go or not to a music festival that has just been announced.]



[Context: A conversation between Participant C and a coworker in which he asks her for her brother's number.]






<p>[Context: A conversation between Participant C and a friend in which she tells her that she has bought tickets for an upcoming music festival she knows her friend will be going to.]</p> 	<p>[Context: A conversation between Participant C and a coworker about their boss allowing them to leave early if there isn't much to do.]</p> 
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## APPENDIX F - Participant D

### Tweets

All the tweets by Participant D that were analyzed, in chronological order from April 2017 to April 2019:

<p>Guys, best novel ever : The Name of the Wind. If you like fantasy novels, you got to read it. You won't regret it 🙌</p> <p>21:08 - 23 d'abr. de 2017</p>	<p>I would love it if someone bought me a bouquet of flowers</p> <p>0:15 - 28 de maig de 2017</p>
<p>"cheesy slice of pizza" are just 4 words that make you instantly hungry</p> <p>19:09 - 24 de juny de 2017</p>	<p>If I'm still slightly good at maths, I gave Louis 140 streams tonight. Just getting started!</p> <p>7:36 - 21 de jul. de 2017</p>


















<p>Good night God bless you x</p> <p>23:39 - 19 d'ag. de 2017</p>	<p>Primero fueron a por los catalanes...</p> <p>12:27 - 27 d'oct. de 2017</p>
<p>Els meu avi va venir d'Almería i va trobar refugi a Catalunya. El diumenge votará SÍ</p> <p>15:46 - 26 de set. de 2017</p>	<p>COCO IS THE BEST DISNEY MOVIE</p> <p>16:13 - 27 de nov. de 2017</p>
<p>MERRY CHRISTMAS HAVE A BLESSED DAY</p> <p>12:33 - 25 de des. de 2017</p>	<p>I quite like scary video games</p> <p>18:10 - 25 de gen. de 2018</p>
<p>La única razón por la que me he dejado el pelo largo es para que alguien me lo toque y peine.</p> <p>8:42 - 27 de febr. de 2018</p>	<p>OMG coming accross Crazy Nicole is like meeting SLENDERMAN. So exciting hahaha</p> <p>17:41 - 23 de març de 2018</p>
<p>DIUMENGE TOTS A VILADECALLS A MENJAR EL BERMUDET</p> <p>#LlibertatPresosPolitics</p> <div data-bbox="263 1489 778 1608">  <p>KERRADA VERMUT @ Diumenge a les 11H tenim amb nosaltres la @BeatrizTalegon per escoltar-la i aprendre d'ella. Fraternitat. amb bea talegon #Viladecavalls</p> </div> <p>15:54 - 19 d'abr. de 2018</p>	<p>Is being monogamous boring.</p> <p>17:41 - 22 de maig de 2018</p>








## Instagram posts

All the Instagram captions by Participant D that were analyzed, in chronological order from April 2017 to April 2019, accompanied by photo descriptions to provide context. All usernames have been censored and all names substituted by fake ones:


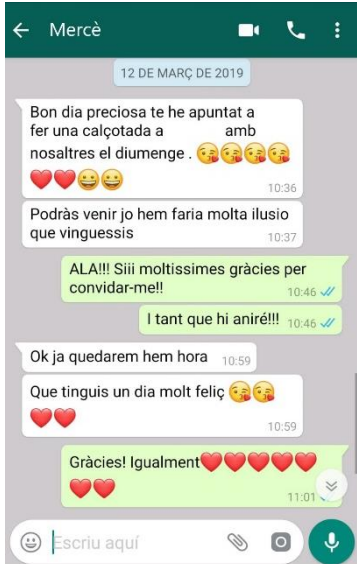
<p>[Photo description: A selfie of Participant D with her mother and sister at a wedding venue.]</p> <p> The ones getting married are not as excited as we are</p> <p>111w</p>	<p>[Photo description: A picture of Participant D holding a baby in a swimming pool.]</p> <p> I made such a good friend</p> <p>106w</p>
<p>[Photo description: A picture of the present described in the caption.]</p> <p> My sister literally got me an oyster with a pearl inside, which you can put on a pendant and it grants your a wish. I got the cream pearl "happiness and emotional calm". I couldn't be more thankful.</p> <p>98w</p>	<p>[Photo description: A selfie of Participant D with her sister and nephew at Disneyland Paris.]</p> <p>  The happiest place on Earth</p> <p>101w</p>
<p>[Photo description: A picture of Participant D with her family in front of a castle.]</p> <p> Family means nobody gets left behind~</p> <p>90w</p>	<p>[Photo description: A selfie of Participant D with Participant C.]</p> <p> I realised I never posted this and we look cute af </p> <p>88w</p>
<p>[Content description: A video in which the ballot boxes of the 1st of October 2017 are taken out of the polling place.]</p> <p> URNES SALVADES</p> <p>85w</p>	<p>[Photo description: A picture of Participant D with two cosplayers at a convention.]</p> <p> Not my best pic but I had so much fun as Clementine and here I am with Elizabeth and Booker </p> <p>80w</p>
<p>[Photo description: A selfie of participant D.]</p> <p>  Merry Christmas Eve!!! </p> <p>73w</p>	<p>[Photo description: A picture of a small dog looking up at the camera.]</p> <p> Pay attention to me</p> <p>71w</p>
<p>[Photo description: A picture of Participant D in front of a rainbow.]</p> <p> my gay self™ is content</p> <p>67w</p>	<p>[Photo description: Three pictures of Participant D posing in front of a mirror.]</p> <p> Took me forever to choose three pics because I looked beautiful in all of them.</p> <p>62w</p>

<p>[Photo description: A picture of Participant D sitting on the floor at the Sky Garden.]</p> <p> Shout out to my haters. You tried♥ 57w</p>	<p>[Photo description: A picture of Participant D sitting by a garden with a small dog on her lap. The censored usernames belong to two friends unconnected to the degree.]</p> <p> When I look at this picture I smile, because it reminds me of wonderful times with my daughters @ and @ ♥ 54w</p>
<p>[Photo description: A picture of a pride flag with the hashtag “#pride” on it.]</p> <p> always. #happypridemonth🌈 #loveislove #gay 50w</p>	<p>[Photo description: A picture of Participant D in front of a cathedral.]</p> <p> if you zoom in on my head, you'll see that 'portrait mode' has blurred out a piece of it because my hair is the same color as the stairs behind me and I think that's beautiful 44w</p>
<p>[Photo description: A picture of Participant D posing in front of some flowers.]</p> <p> let's go fly a kite 41w</p>	<p>[Photo description: An older picture of Participant D taking a selfie in front of a waterfall.]</p> <p> #throwback to one of the best pictures of me that I have ♥ 35w</p>
<p>[Photo description: A picture of Participant D with her parents and grandparents.]</p> <p> La familia és la fortalesa i la feblesa. 31w</p>	<p>[Photo description: A picture of Participant D tucked in bed with her cat.]</p> <p> We're all cold in this house ♥ 28w</p>
<p>[Photo description: A picture of Participant D smiling at the camera.]</p> <p> shut your eyes and see 22w</p>	<p>[Photo description: A picture of Participant D posing in front of a wall.]</p> <p> New year, new opportunities to be happy and to continue loving and caring for myself and those around me♥♥♥ 19w</p>

<p>[Photo description: A selfie of Participant D with her friends pointing to their composite picture.]</p>  <p>we're on the hall of fame</p> <p>15w</p>	<p>[Photo description: A picture of Participant D with two female friends on the 8th of March.]</p>  <p>Laura y sus chicas ♀♀♀ PER MOLTS ANYS GUAPISSIMA 💜💜💜</p> <p>10w</p>
<p>[Photo description: A picture of Participant D with her grandparents.]</p>  <p>En els moments més difícils, quan sents ganes de rendir-te i de plorar sense parar a diari... la família sempre està allà♥ Ja queda poc...</p> <p>6w</p>	

### WhatsApp conversations

These are conversations Participant D had with people unconnected to the degree, accompanied by context provided by the participant. All names have been substituted by fake ones. Green messages belong to Participant D:

<p>[Context: A conversation between Participant D and her mother. The censored box is a selfie Participant D took of her with her father.]</p> 	<p>[Context: A conversation between Participant D and her aunt, who invites her to lunch at a small town with her family.]</p> 
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← Daniel

Dormir 11 hores despres d'ingerir una  
cantitat preocupant de sucre 12:21

Em fa molt feliç 12:21

Morite jove 12:21

Pero feliç 12:21

jajajajajaja 12:41 ✓✓

jo he arreglat una mica la casa 12:41 ✓✓

i ara a treballar as fuck 12:41 ✓✓

podem fer discord o marxes? 12:41 ✓✓

Stic fent vicote 12:57

Despres netejare la habitacio 12:57

dakor amic 13:07 ✓✓

avisam quan et disposis a treballar 13:07 ✓✓

😊 Escriu aquí

← Lúdia

Amore 13:19

Juan ya me ha dicho que si 13:19

Oficial a lo de Berlín 13:19

Solo falta saber cuándo exactamente  
(que yo quiero a mediados de agosto)  
y que yo encuentro una habitación  
donde vivir 13:20

🥰🥰🥰 lloro por esta felicidad 13:20

BIEEEN 16:11 ✓

Ary 🍷❤️

Solo falta saber cuándo exactamente  
(que yo quiero a mediados de agosto)  
y que yo encuentro una habitación donde ... 16:11 ✓

¡igual que yo a andar!! 16:11 ✓

ME ALEGRO MUCHO Y ESTOY SUPER  
ORGULLOSA DE TI 16:11 ✓

que paso mas grande 16:11 ✓

pero todo saldra genial 16:11 ✓

Tu

ME ALEGRO MUCHO Y ESTOY SUPER  
ORGULLOSA DE TI

Jajajaja yo más de tiii 18:27

Proud!! 18:27

Buen fin de semana mi niña 18:28 ✓

Escríu aquí

← Papi 🇧🇪 🇩🇪 🇮🇹

es veritat 😭 21:54 ✓

AVUI

papi on estas situat?? 9:45 ✓

A 9:46

Tornaré aviat 9:46

vale! 9:47 ✓

em ducho i tespero per anar a votar 9:47 ✓

Anem a votar i saludar a la mama quan arribi 9:47

vale fins ara wapu ❤️ 9:47 ✓

conduex amb precaucio 9:47 ✓

🤔 9:47

😊 Escriu aquí

← Gina

20 DE MAIG DE 2019

CARLOTA HAS VIST EL ULTIM CAPITOL 12:14

JO SI 12:14

NO ENCARA NO 12:21 ✓

NO SPOILERS PLEASE 12:21 ✓

TE GANÉ X FIN HE VIST UN CAPITOL ABANS Q TU JAJAJAJAJAJAJA 12:22

Sisi ya me diras quan el vegis 12:22

JAJAJAJA tia com lhas vist tan rapid 12:25 ✓

He matinat loco 14:12

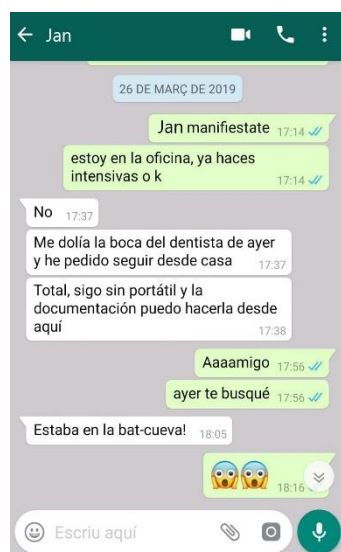
A les 9 del mati 14:12

21 DE MAIG DE 2019

😊 Escriu aquí

📎 📷 🎤

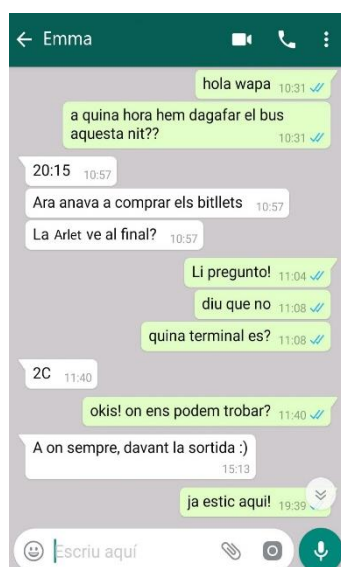
[Context: A conversation between Participant D and her brother-in-law, in which she asks where he is since he cannot see him at the office where they both work at.]



[Context: A conversation between Participant D with a friend.]



[Context: A conversation between Participant D and her sister, in which they are meeting up to catch a bus together. Her sister asks if her other sister is coming.]



[Context: A conversation between Participant C and her sister in which she tells her that a youtuber they both enjoy has just uploaded a new video.]

